

REPORT ON SURVEY OF LABOUR CONDITIONS IN MICA MINING INDUSTRY IN INDIA (1962-63)



**LABOUR BUREAU
MINISTRY OF LABOUR AND EMPLOYMENT
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PREFACE

Industrial labour and its problems have been the subject of interest, though varying in degree and extent, ever since India entered the industrial field over a century ago. Today, this interest has shifted from prevention of exploitation of labour to providing a fair deal and opportunities for a fuller life to labour. The growing realisation of this approach to problems of labour in India, in the context of present-day planned economic development of the country, is provided a sound base by the surveys that reveal true conditions of labour.

The last detailed survey on a country-wide basis of the working and living conditions of industrial labour was conducted by the Labour Investigation Committee appointed by the Government of India in 1944. The years that followed witnessed far-reaching changes in the set-up of the country, its basic policies and national objectives. As a result, the long-term strategy for economic and industrial advance recognises the well-being of the working class as an essential factor in the overall stability and progress of the country. The adoption of this policy, in the changed circumstances of the country, has brought about a new awakening in the ranks of labour and afforded them much relief in various directions through legislation and other measures.

In order to assess the impact of these measures on the industrial labour and to appraise their present conditions, a scheme for a comprehensive Survey of Labour Conditions was incorporated in the Second Five Year Plan and its execution was entrusted to the Labour Bureau. The Survey was conducted according to a phased programme in 46 industries*. This report presents data regarding Mica Mines covered under the scheme during 1962-63.

The present Survey differs considerably from similar investigations in the past in matters of design, scope and presentation of data. It has also certain distinguishing features. For example, it furnishes data separately for large and small establishments in various industries, makes a limited study of labour cost in relation to the benefits and amenities that the workers now enjoy, seeks to fill the gap in the statistics of labour turnover and absenteeism in the various industries and provides first-hand information on certain important aspects of labour-management relations. Attempt has also been made to collect and interpret data on certain conventional items in a more meaningful way. In the presentation of the data, the effort has been to reduce the information into quantitative terms so as to serve as a bench-mark for purpose of evaluation of changes at a future date. Recourse to general description has been resorted to only where the other type of treatment was not possible.

In a survey of this magnitude, it was but natural that many problems had to be faced both in planning as well as execution. Most of these flowed from non-availability of up-to-date frames and absence or improper maintenance of records in many establishments. In many cases, the field staff

*The names of 46 industries are given in the Preface (p. iii) attached to the Report on Survey of Labour Conditions in Silk Factories in India.

had almost to build up the required statistics from various sources. This naturally imposed a heavy demand on the managements and the Bureau is deeply indebted to them for their whole-hearted co-operation. The co-operation and valuable assistance received from associations of employers and workers, Chief Labour Commissioner (Central), Chief Inspector of Mines and their officials is also gratefully acknowledged.

The debt of gratitude that I owe to the Central Statistical Organisation and the Chief Inspector of Mines for evincing keen interest in the Survey and rendering technical advice on various matters is indeed great. I am also thankful to the Employment Division of the Planning Commission for examining the schedule and instructions and offering useful suggestions. I am equally grateful to the Bureau of Labour Statistics, U.S.A., Social Surveys Division, Ministry of Labour and Social Service, U.K., Economics and Research Branch, Department of Labour, Canada and Labour Statistics and Research Division, Ministry of Labour, Japan, whose advice was sought on several technical matters.

The primary responsibility for conducting this Survey and bringing out the reports on individual industries was ably borne by Shri B. N. Srivastava, Deputy Director, whose experience and application came into full play in this assignment. On various statistical problems arising out of the Survey, the requisite technical advice was provided by other officers at Headquarters. This particular industry report was drafted by Shri Harbans Lal, Assistant Director, who received valuable assistance from Shri Mahesh Chandra, Investigator Grade I. Sarvashri S. P. Gupta and Kanwar Singh, Computers, assisted in computation of data. The field investigations were carried out by Sarvashri Harjit Singh, R. V. Venkatachalam, S. J. Balasubramaniam, D. R. Arora, R. P. Kapoor, R. L. Bembay, K. V. Vasudevan, V. Jayaraman, Rajendra Prasad, N. C. Gupta, S. S. Kaul, S. S. Sethi, Harish Chandra Bharti, M. L. Bhagra and R. N. Khera under the supervision of Sarvashri J. N. Agarwal, S. Vaidyanathan, K. L. Lamba and G. N. Nagar. To these all my thanks are due.

The view expressed in this report are not those of the Ministry of Labour and Employment, Government of India.

LABOUR BUREAU, SIMLA.

K. C. SEAL

Dated the 27th November, 1965.

Director

CHAPTER I

INTRODUCTION

1.1. *Origin and Growth of the Industry*

Mica Mining Industry of India is nearly a century old. Its importance increased tremendously with the discovery of unique insulating and heat resisting qualities of mica for use in electrical machinery, appliances and gadgets. Thus, as against a material for decorative use, mica has become a key material for industrial development and an item of great strategic importance. India has the largest known mica deposits in the world and in fact supplies two-thirds of the world's requirements. In 1961, India produced 28.2 thousand tons of crude mica and during 1961-62 it exported uncut and unmanufactured mica worth Rs. 96.6 million.* Thus Mica Mining Industry is an important foreign exchange earner. The following Statement shows the number of mica mines and persons employed therein in 1947 and from 1951 to 1961:

STATEMENT 1.1

Number of Mica Mines and Average Daily Number of Workers Employed Therein in 1947 and 1951 to 1961

Year							Number of mines	Average Daily employment (in thousand)
(i)							(ii)	(iii)
1947	..	..	..	..	..	..	740	31.7
1951	..	..	..	..	..	..	1,160	52.2
1952	..	..	..	..	..	..	1,010	41.0
1953	..	..	..	..	..	..	941	33.9
1954	..	..	..	..	..	..	881	27.3
1955	..	..	..	..	..	..	880	30.6
1956	..	..	..	..	..	..	849	34.0
1957	..	..	..	..	..	..	949	35.3
1958	..	..	..	..	..	..	868	33.5
1959	..	..	..	..	..	..	868	32.5
1960	..	..	..	..	..	..	927	33.3
1961	..	..	..	..	..	..	808	29.6

Source—Annual Reports of the Chief Inspector of Mines.

*Statistical Abstract of the Indian Union 1962—Central Statistical Organisation, Government of India.

Since the bulk of mica produced in the country is exported, the working of the industry is very much influenced by the international trade conditions. Moreover, fluctuations in the number of mines and employment are also due to the fact that, unlike coal, mica vein is not in a continuous stretch and, accordingly, deep and underground mining is not generally undertaken because of the high cost involved and uncertainty of deposits. The lessee, generally, prefers to confine to the surface mining only and after a year or two, when the surface deposits are exhausted, the pits are abandoned and new prospecting pits are started.

1.2. Structure and Location of the Industry

The industry, as it exists in the country at present, comprises both large and small mines, all of which are privately-owned. Mica mines are generally located in Bihar, Rajasthan, Andhra Pradesh, Madras and Mysore. From the point of view of both number of mines and employment, Bihar occupies the top-most position and accounts for over 60 per cent. of mines and nearly half the number of workers employed in the industry. Rajasthan claims nearly one-fourth of the mines as well as employment. The remaining, are mostly in Andhra Pradesh. The following Statement 1.2 shows the State-wise distribution of mica mines and total employment therein during 1961:

STATEMENT 1.2

Distribution of Mica Mines According to Principal Mica Producing States—1961

State							Number of mines*	Average daily employment
(i)							(ii)	(iii)
1. Bihar	..	..	..	..	..	..	517	15,098 (50·9)
2. Rajasthan	..	..	..	..	..	..	202	8,086 (27·3)
3. Andhra Pradesh	..	..	..	..	..	..	82	6,296 (21·3)
4. Other States (Madras and Mysore)	..	..	..	..	..	..	7	155 (0·5)
Total							808	29,635 (100·0)

Source—(Annual Report of the Chief Inspector of Mines, 1960).

*Relate to mines registered under the Mines Act.

NOTE—Figures in brackets are percentages to total employment.

1.3. *Genesis of the Survey*

The first comprehensive survey into the conditions of labour in various industries in India was conducted by the Royal Commission on Labour during 1929-31. On the basis of its report and findings, various ameliorative measures were introduced by Government in the labour field. After a lapse of over a decade, i.e., in 1944, the Government of India appointed another Committee, viz., the Labour Investigation Committee, to enquire into the conditions of labour in all important industries. The Committee conducted detailed investigations in 38 industries (including Mica Mines) during 1944-45 and, besides a main report on labour conditions in general, published individual reports in respect of various industries. These reports provided valuable material for the formulation of labour policy. The years that followed witnessed many changes of far-reaching significance. For instance, many legislative measures were adopted to improve working and living conditions and several schemes were introduced for promoting welfare and social security of workers. The setting up of the adjudication machinery also led to an improvement in conditions of work and wages of workers employed in various industries. Above all, the attainment of Independence by the country gave a new status to the working classes. In view of these developments, the Ministry of Labour and Employment as well as the Planning Commission considered it necessary that a fresh comprehensive survey of labour conditions in various industries should be conducted so that it may be possible to assess the effects of the various measures and to obtain a precise picture of the existing conditions and problems of labour for purposes of deciding future course of action. Accordingly, a scheme for the conduct of a Survey of Labour Conditions was included in the Second Five Year Plan and the Labour Bureau was entrusted with the execution of the Scheme.

1.4. *Scope and Design*

A note* appended to the report gives details relating to the sampling design and the method of estimation adopted. Since there was high concentration of mica mines in Bihar and Rajasthan, it was decided to obtain separate information for them and, hence, they were treated as separate Regional Strata. Mines located in all other States were grouped together to form the Residual Group. Of the States included in this Group, Andhra Pradesh was the most important State accounting for almost all the mines in this group.

Earlier investigations had indicated existence of wide variations in conditions of work, standards of welfare amenities, etc., in the establishments of different size-groups in various industries. To facilitate examination of differences and peculiarities of workers engaged in small mica mines *vis-a-vis* large mines, it was decided to divide mines into two size-groups. Units in each regional stratum were, therefore, divided into large and small on the basis of the average size of mica mines in the country from the point of view of employment. The cut-off point so used was 39 for the year 1958, i.e., all mines employing more than 39 workers were treated as large and the rest as small. The sampling fraction adopted was 33.4 per cent. for large mines and 16.7 per cent. for small mines.

*Appendix.

For purposes of drawing the samples, the 1958 list of mica mines registered under the Mines Act, the latest that was available, was used. The following Statement 1.3 shows the number of mica mines with the number of workers employed therein (a) in the frame, (b) in samples, and (c) samples actually covered:

STATEMENT 1.3

Number of Mica Mines and Persons Employed Therein in the Frame and As covered by the Survey

Centre	In the frame (1958)		Sample selected		In the sample ultimately covered	
	Number of mines	Number of workers employed	Number of mines	Number of workers employed	Number of mines	Number of workers employed
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)
1. Bihar	566	19,190	122 (21·6)	4,970 (25·9)	49 (8·7)	2,648 (13·8)
(a) Large mines ..	168	11,085	56 (33·3)	3,600 (32·5)	33 (19·6)	2,296 (20·7)
(b) Small mines ..	398	8,105	66 (16·6)	1,370 (16·9)	16 (4·0)	352 (4·3)
2. Rajasthan	217	7,817	48 (22·1)	2,164 (27·7)	20 (9·2)	1,154 (14·8)
(a) Large mines ..	69	4,927	23 (33·3)	1,681 (34·1)	9 (13·0)	880 (17·9)
(b) Small mines ..	148	2,890	25 (16·9)	483 (16·7)	11 (7·4)	274 (9·5)
3. Residual	85	6,531	23 (27·1)	2,314 (35·4)	12 (14·1)	1,777 (27·2)
(a) Large Mines ..	50	5,757	17 (34·0)	2,163 (37·6)	11 (22·0)	1,741 (30·2)
(b) Small mines ..	35	774	6 (17·1)	151 (19·5)	1 (2·9)	36 (4·7)
9. All India	868	33,538	193 (22·2)	9,448 (28·2)	81 (9·3)	5,579 (16·6)
(a) Large mine ..	287	21,769	96 (33·4)	7,444 (34·2)	53 (18·5)	4,917 (22·6)
(b) Small mines ..	581	11,769	97 (16·7)	2,004 (17·0)	28 (4·8)	662 (5·6)

NOTE—Figures in brackets are percentages to respective totals in the frame.

It will be seen that, out of the sampled units selected (vide col. iv), nearly 58 per cent. of the mines were found closed at the time of the Survey. The closure rate was particularly high in the case of small mines. Thus, the Survey actually covered about 9 per cent. of the total number of mines accounting for nearly 17 per cent. of the total employment in the industry. In view of a very high rate of closure of small mines, the samples actually covered were found to be too few to give any reliable estimate separately for the small mines. Hence, separate data are not being given in this report for the two size-groups.

Work in mica mines is done both underground and aboveground (i.e., surface and opencast). The statistics published by the Chief Inspector of Mines indicate that of the total number of 29,635 persons employed in 1961, workers engaged in underground operations accounted for 17,004 or about 57 per cent. of the total employed in the industry and the rest were engaged in surface and opencast operations. In view of the fact that majority of workers were employed underground, data on certain important items such as labour turnover, absenteeism, shift-hours, etc., were collected separately for underground and aboveground workers and they have been presented at the appropriate places in the report.

Since only those mines came in the sample as featured in the frame and as it was not possible to take account of new mines which came into being during period of the Survey, the information in this report should be treated to relate to conditions in the mines which were in existence during the period to which the frame relates (i.e., 1958) and which continued to exist at the time of the Survey.

The data were collected by personal visits of the field staff of the Bureau. With a view to testing the schedule and instructions prepared for the Survey as also to impart training to the field staff, a pilot enquiry was conducted in September and October, 1959. On the basis of the experience of this enquiry as also of the First and Second Rounds of the Survey, the schedule* and instructions were suitably modified. The field enquiry in this industry was launched in October, 1962 and completed in September, 1963. The data, except where specifically mentioned, should be treated to relate to this period.

Mica mines were covered by the Labour Investigation Committee in the course of their enquiry during 1944-45. With a view to indicating the developments and changes which have taken place since then, some remarks have been given in this report regarding the position at the time of the Committee's enquiry and the present Survey. Since there are differences in the scope of the previous enquiry and this Survey, the comparisons wherever made, may be treated to be only broadly valid.

*A copy of the Schedule is given as Appendix II in the Report on Survey of Labour Conditions in Silk Factories in India.

CHAPTER II

EMPLOYMENT

From the point of view of employment, the Mica Mining Industry ranks fifth among the mining industries of India. In the course of the Survey, data were collected on several aspects of the composition of the working force in the mica mines. These related to distribution of workers according to (a) broad occupational groups, (b) men, women and adolescents, (c) method of payment, (d) employment status and (e) length of service. The information collected is discussed in the succeeding paragraphs.

2.1. *Composition of the Working Force—Distribution According to Broad Occupational Groups*

With a view to maintaining comparability as well as uniformity, statistics relating to employment were collected for a fixed date, i.e., 30th June, 1962, from all the selected mines. It is estimated that on this date the total number of persons employed in the industry was about 22 thousand. The following Statement 2.1 shows the distribution of employees by broad occupational groups in various centres. The broad occupational groups were: (a) Professional, Technical and Related Personnel, (b) Administrative, Executive and Managerial Personnel, (c) Clerical and Related Workers (including Supervisory), (d) Production and Related Workers (including Supervisory), and (e) Watch and Ward and Other Services. The classification was based on the International Standard Classification of Occupations as adopted by the International Labour Office:

STATEMENT 2.1

Estimated Distribution of Workers by Broad Occupational Groups As On 30th June, 1962

Centre	Total	Professional, Technical and Related Personnel	Administrative, Executive and Managerial Personnel	Clerical and Related Workers (including Supervisory)	Production and Related Workers (including Supervisory)	Watch and Ward and Other Services
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)
1. Bihar	11,182	32 (0.3)	277 (2.5)	274 (2.4)	9,667 (86.5)	932 (8.3)
2. Rajasthan	4,696	..	82 (1.8)	63 (1.3)	4,110 (87.5)	441 (9.4)
3. Residual*	6,169	7 (0.1)	44 (0.7)	95 (1.5)	5,766 (93.5)	257 (4.2)
4. All India	22,047	39 (0.2)	403 (1.8)	432 (2.0)	19,543 (88.6)	1,630 (7.4)

[Figures in brackets are percentages to the respective totals in Col. (ii).]

*All the units covered in this group were located in Andhra Pradesh as the units selected in other States included in this group were found closed at the time of the survey.

The above statistics show that the bulk of the working force in mica mines comprised production workers who accounted for nearly 89 per cent. of the total workers employed in the industry. Next in the order those employed in the group 'Watch and Ward and Other Services' constituting about 7 per cent. of the total. Persons in the other groups accounted for the rest.

In order to assess the relative importance of workers employed 'underground' and 'aboveground', data relating to production workers were collected separately for each department. Statement 2.2 shows the distribution of production workers employed 'underground' and 'aboveground' in various centres :

STATEMENT 2.2

Estimated Number of Production and Related Workers Employed Underground and Aboveground as on 30th June, 1962

Centre	Estimated number of Production Workers								
	Employed direct by Managements			Employed through contractors			Total Production workers		
	Above-ground	Under-ground	Total	Above-ground	Under-ground	Total	Above-ground	Under-ground	Total
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)
1. Bihar ..	733 (8.5)	7,865 (91.5)	8,598 (100.0)	107 (10.0)	962 (90.0)	1,069 (100.0)	840 (8.7)	8,827 (91.3)	9,667 (100.0)
2. Rajasthan	1,537 (37.4)	2,573 (62.6)	4,110 (100.0)	..	..	..	1,537 (37.4)	2,573 (62.6)	4,110 (100.0)
3. Residual	2,890 (50.1)	2,876 (49.9)	5,766 (100.0)	..	..	..	2,890 (50.1)	2,876 (49.9)	5,766 (100.0)
4. All India	5,160 (27.9)	13,314 (72.1)	18,474 (100.0)	107 (10.0)	962 (90.0)	1,069 (100.0)	5,267 (27.0)	14,276 (73.0)	19,543 (100.0)

(Figures in brackets are percentages to the respective totals).

Taking the industry, as a whole, it would appear that 73 per cent. of the total production workers were engaged in underground mining operations and the rest were employed aboveground. The percentage of the underground workers was the highest (91) in Bihar, followed by Rajasthan (63) while it was about 50 in the Residual Group.

The estimated total employment of about 22 thousand mentioned earlier includes persons deemed to be workers and, hence, covered under the Mines Act, 1952, and also those who were not considered to be workers for purposes of the Act. Data collected during the Survey indicate that the proportion of workers who were not covered under the Mines Act, 1952, was insignificant (i.e., only 0.04 per cent. of the estimated working force in the industry in the entire country). None of the employees not covered under the Act was employed as a production and related worker. About three-fourths of them belonged to the group 'Administrative, Executive and Managerial Personnel' and the rest to 'Clerical and Related Workers'. None of the 'not covered' workers was found engaged in the mica mines located in Rajasthan.

2.2. Employment of Women and Adolescents*

It would appear from the report of the Labour Investigation Committee that in 1944-45 women constituted about 4, 46 and 20 per cent. of the labour force employed in mica mines in Bihar, Madras and Rajputana respectively. Similarly, children formed about 15 per cent. of the total employment in Bihar and Rajputana. In Madras, employment of children was reported to be negligible. The Committee had further reported that, in contravention of the Indian Mines Act, both women and children were employed underground in mines quite openly in all the three mica areas.

The following Statement 2.3 shows the relative employment strength of men, women and adolescents in the industry as at the time of present Survey:

STATEMENT 2.3

Estimated Proportion of Men, Women and Adolescents in the Working Force as on 30th June, 1962

Centre					Estimated number of workers employed	Estimated number of		
						Men	Women	Adole- scents
(i)					(ii)	(iii)	(iv)	(v)
1. Bihar	..	..	..	..	11,182	11,144 (99·7)	38 (0·3)	..
2. Rajasthan	..	..	..	..	4,696	4,430 (94·3)	266 (5·7)	..
3. Residual	..	..	..	..	6,169	4,293 (69·6)	1,865 (30·2)	11 (0·2)
4. All India	..	..	..	..	22,047	19,867 (90·1)	2,169 (9·8)	11 (0·1)

NOTE—(Figures in brackets are percentages to respective totals).

It will be seen from the above Statement that the working force in the industry consisted predominantly of men. Women accounted for about 10 per cent. of the total employed in the industry. The proportion of women to the total workers was the highest (30%) in the Residual Group. In Rajasthan, women constituted nearly 6 per cent. of the total while they formed only an insignificant proportion to the total working force in Bihar.

Women were, generally, engaged in such jobs as mud removing and mica cutting or as shearers, *mazdoors*, water carriers, creche *ayahs*, sweepers, etc. Wherever employed, they were engaged only on surface or in open-cast departments.

The practice of engaging adolescents was in vogue in only one of the sampled mines in the Residual Group. They constituted a very negligible proportion to the total working force and were engaged as mica cutters.

The system of employing child labour was not in vogue in any of the sampled units in the industry.

2.3. Time-rated and Piece-rated Workers

The Survey results show that the predominant system was payment by time which accounted for 99·8 per cent. of the workers. The rest were

*I.e., persons between the ages of 15 and 18 years.

piece-rated. In fact, piece-rate system was reported in only one sampled mine in the Residual Group. The percentage of piece-rated workers to the total workers in this group was 0.7. All workers in Rajasthan and Bihar were being paid on the basis of time only.

2.4. *Contract Labour*

The system of employing workers through contractors was not much in vogue in the Mica Mining Industry. The findings of the Survey have revealed that contract labour was employed only in a few mica mines in Bihar. In other centres, such a system was not reported in any of the sampled units. In Bihar, workers engaged through contractors constituted about 11 per cent. of the total production workers employed in that centre giving a percentage of nearly 5 for the industry in the country, as a whole. Wherever contract labour were employed, they were engaged for production jobs—'underground' as well as 'aboveground'. The reasons adduced by the employers for engaging contract labour were as follows:

- (i) There was a shortage of labour in the area and, hence, the managements preferred to get the work done on contract basis so that the responsibility of bringing the required number of workers for the work rested with the contractors.
- (ii) In view of uncertainties of mica strikes it is preferable to entrust prospecting work to contractors rather than engage regular permanent employees direct.
- (iii) Proper production could be ensured only by contractors and, hence, the job was given on contract.

2.5. *Employment Status*

In the course of the Survey, information was collected regarding employment status of production workers employed direct by the managements (i.e., excluding those employed through contractors) and covered under the Mines Act. The classification of workers into permanent, temporary, etc., is regulated by the Standing Orders framed by the managements in pursuance of the Industrial Employment (Standing Orders) Act, 1946. However, since the Act requires only those employers who employ 100 or more workers to frame Standing Orders, all the mines had not framed them. In mines where there were no Standing Orders, the information relating to employment status was collected on the basis of the version of the managements. The following Statement 2.4 gives the details:

STATEMENT 2.4

Estimated Distribution of Production Workers Employed Direct by Employment Status—June, 1962

Centre	Estimated number of production workers employed direct	Estimated percentage of workers who were				
		Perma- nent	Proba- tioners	Temporary	Appren- tices	Casual, Badli, etc.
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)
1. Bihar	.. 8,598	47.4	..	52.4	0.2	..
2. Rajasthan	.. 4,110	39.8	..	60.2	..	..
3. Residual	.. 5,766	67.3	..	30.7	2.0	..
4. All India	.. 18,474	51.9	..	47.4	0.7	..

In the industry in the country, as a whole, nearly 52 per cent. of the directly employed production workers were permanent, about 47 per cent. temporary and the rest were apprentices. The proportion of permanent workers was the highest (67%) in the Residual Group, while in Bihar and Rajasthan, temporary workers constituted the majority of the working force. The main reason for such a high proportion of temporary workers in Bihar was attributed by managements to the quitting of jobs by workers after short intervals, thereby necessitating fresh recruitment in their places. In Rajasthan, workers were reported to be leaving their service in the units whenever they had to attend to agricultural operations in their village. Moreover, in view of uncertainties of mica finds, managements frequently abandoned the lease of plots taken by them if the prospecting did not seem to be hopeful or if they found that operations became costly. Those mines where only surface operations were done were generally closed during rainy season and workers returned to their villages. It was also reported that whenever any mine closed down temporarily, the workers left the unit and when it re-opened, fresh recruitment was made by the management.

2.6. *Length of Service*

In the course of the present Survey, statistics relating to the length of service of production and related workers (including supervisory) employed direct by the managements and covered under the Mines Act were collected and the details are given in Statement 2.5. Wherever managements maintained any records showing the date of appointment of their employees (e.g., service cards, leave records, etc.), the information was collected from such records but in their absence, the version of the managements was taken.

The statistics show that in the industry, as a whole, about 66 per cent. of the workers had a service of less than one year, another 24 per cent. had between one and less than five years of service and only a small proportion had longer length of service. The percentage of workers who had put in less than one year's service was highest (71) in Bihar and lowest (58) in the Residual Group. The high proportion of workers with a lower length of service was due mainly to the fact that workers left the job frequently to attend to agricultural operations in their villages. Other reasons as given in para 2.5 above hold good here also.

2.7. *Absenteeism**

Data on absenteeism were collected for a period of 12 months, i.e., July, 1961 to June, 1962, in respect of production workers employed direct (i.e., excluding contract labour) and the same are presented in Statement 2.6. No information could be collected in respect of workers employed through contractors as, generally, no records were available or the records were found to be maintained improperly. It may be mentioned that the Bureau very much desired to collect statistics of absenteeism by causes but as the managements did not maintain record of absences by causes, it was not possible to collect precise information about causes of absenteeism but had to be satisfied with general information given by the managements.

*Absenteeism is the failure of the worker to report on the job when he was scheduled to work but does not include absences on account of strikes or lock-outs or lay-off. The rate of absenteeism is the percentage of the man-days lost due to absence to the total man-days scheduled to work during the month.

STATEMENT 2.5

Estimated Percentage Distribution of Direct Employed Production Workers According to Length of Service—June, 1962

Centre	Estimated number of production workers employed direct	Percentage of workers with a service of				
		Less than one year	One or more but less than 5 years	5 or more but less than 10 years	10 years or more but less than 15 years	15 years or over
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)
1. Bihar	8,598	70.6	18.3	7.8	2.5	0.8
2. Rajasthan	4,110	68.6	26.6	4.4	0.3	0.1
3. Residual	5,766	57.7	30.4	8.3	3.0	0.6
4. All India	18,474	66.1	24.0	7.2	2.2	0.5

STATEMENT 2.6

Estimated Rate of Absenteeism in Mica Mines during July, 1961 to June, 1962

Month	Bihar			Rajasthan			Residual			All India		
	Under-ground	Above-ground	Over-all	Under-ground	Above-ground	Over-all	Under-ground	Above-ground	Over-all	Under-ground	Above-ground	Over-all
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)	(xi)	(xii)	(xiii)
<i>1961—</i>												
July ..	21.8	10.9	20.7	12.4	11.8	12.2	15.2	9.4	12.3	17.9	10.2	15.6
August ..	19.7	10.3	18.9	8.7	8.9	8.8	14.1	10.9	12.4	15.8	10.4	14.2
September	17.0	8.2	16.3	14.0	18.3	15.6	13.5	10.3	11.8	15.5	12.2	14.5
October	25.1	15.3	24.3	11.8	16.2	13.6	12.8	8.6	10.5	19.1	11.4	16.5
November	22.0	12.2	21.3	9.7	14.1	11.4	15.9	12.9	14.3	18.4	13.1	16.8
December	17.9	8.2	17.1	9.8	9.3	9.6	13.2	11.9	12.5	15.0	10.8	13.8
<i>1962—</i>												
January	17.4	9.2	16.7	10.2	7.8	9.4	16.1	15.2	15.7	15.5	12.2	14.6
February	18.0	9.6	17.2	9.8	11.3	10.3	12.7	11.7	12.2	15.0	11.3	14.0
March ..	20.4	13.6	19.8	8.8	10.4	9.3	15.3	11.9	13.6	16.5	11.7	15.1
April ..	19.9	13.4	19.3	10.9	12.5	11.4	12.6	10.8	11.7	16.3	11.6	15.0
May ..	22.5	17.3	22.0	16.8	14.5	16.2	15.3	10.2	12.7	19.9	12.2	17.9
June ..	22.4	15.6	21.8	10.6	9.3	10.2	14.6	9.2	11.8	18.5	10.2	16.3

Average—

July, 1961 to

June, 62 20.4 12.3 19.7 11.2 12.1 11.5 14.3 11.0 12.6 17.0 11.4 15.4

It will be seen from the Statement that in the industry, as a whole, the annual rate of absenteeism was 15.4 per cent. As among different centres, the rate of absenteeism was the highest in Bihar (19.7%), followed by the Residual Group (12.6%) and Rajasthan (11.5%): The rate of absenteeism was mostly higher among workers employed 'underground'

than those engaged for opencast and surface operations. The difficult nature of underground work as compared to surface is apparently the main reason for higher absenteeism among underground workers. The absenteeism rate varied as between the different months in the various centres. The variations are discussed below for each centre separately.

(a) *Bihar*: Monthly absenteeism rate varied from 16.3 to 24.3 per cent. It was the highest in October (24.3%), followed by May (22.0%), June, (21.8%), November (21.3%), July (20.7%) and March (19.8%). The main reason adduced by the managements for higher absenteeism during these months was the connection of workers with agriculture. In Bihar, sowing of winter rice takes place from June to August and harvesting operations are carried out between October and December. Workers absent themselves from the mines to attend to agricultural operations during these months. Religious festivals such as *Dussehra* in October, and marriage seasons in April-May are also the causes for high absenteeism during these month. Rains are primarily responsible for higher absences during June to September.

(b) *Rajasthan*: The monthly rate of absenteeism ranged between 8.8 and 16.2 per cent. It was the highest (16.2%) in May, followed by September (15.6%), October (13.6%) and July (12.6%). In this centre also, workers absented themselves from work in order to attend to agricultural operations at their native places. Other reasons for absenteeism were said to be religious festivals such as *Dussehra* and *Diwali* in October-November, marriage seasons from April to May and rains from July to September.

Unlike other centres, in Rajasthan, the annual absenteeism rate among underground workers was slightly lower than that for surface and aboveground workers. The main reason for this, as given by the managements of a few mines, is that underground workers were regular or permanent miners and hence more regular in attendance. On the other hand, surface workers were agricultural labour who worked whenever free from agricultural operations.

(c) *Residual Group*: Monthly absenteeism rate fluctuated between 10.5 and 15.7 per cent. It was the highest (15.7%) in January, followed by November (14.3%), March (13.6%) and May (12.7%). Most of the mines surveyed in this Group were located in the Nellore district of Andhra Pradesh which is an important rice-growing area. Therefore, all the workers have some connection or other with agriculture. They absented themselves whenever they had to attend to agricultural operations, thus resulting in high absenteeism during the above-mentioned months. The main reason for the high rate of absenteeism in November is heavy rains. Often normal communications to mining areas are disrupted because of floods and, hence, workers stay away from work.

2.8. *Labour Turnover*

Data relating to labour turnover were collected for the same period and for the same group of workers for whom statistics relating to absenteeism were collected. The following Statements 2.7 and 2.8 show the rate of accession and separations in the mica mines in the different centres.

The statistics show that the annual rate of accession and separation in the industry in the country, as a whole, was 20.8 and 18.9 per cent. respectively. Such a high rate seemed to be due to frequently abandoning of working of mines due to reasons mentioned earlier. As for individual centres, the accession rate was the highest in Bihar (24.2%), followed

closely by Rajasthan (24.0%). In the Residual Group, however, the rate was only 14.3 per cent. As regards separations, the rate was highest (23.3%) in Rajasthan, followed by Bihar (20.6%). As in the case of accession, the rate of separation was also comparatively low (13.9%) in the Residual Group.

STATEMENT 2.7

Estimated Accession Rate in Mica Mines During July, 1961 to June, 1962

Month	Bihar			Rajasthan			Residual			All India		
	Under-ground	Above-ground	Over-all	Under-ground	Above-ground	Over-all	Under-ground	Above-ground	Over-all	Under-ground	Above-ground	Over-all
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)	(xi)	(xii)	(xiii)
1961—												
July ..	23.5	7.3	22.0	25.1	23.0	24.4	14.4	17.1	15.8	21.6	17.5	20.4
August ..	31.3	5.0	29.1	27.5	27.4	27.5	12.4	23.4	18.2	26.0	22.2	24.9
September	21.0	5.2	19.8	17.1	21.6	18.7	11.4	15.8	13.7	18.0	16.2	17.5
October	22.8	2.1	21.2	13.6	26.2	18.8	18.6	8.1	12.9	20.2	12.4	17.7
November	25.1	11.0	24.0	29.8	27.3	28.8	12.6	8.4	10.4	22.7	13.6	19.9
December	24.2	4.8	22.6	41.2	33.1	38.3	15.8	16.1	16.0	25.4	19.3	23.6
1962—												
January	25.4	18.0	21.9	22.1	19.8	21.4	9.2	14.2	11.8	21.0	16.1	19.6
February	21.5	3.4	19.9	25.1	12.0	20.9	22.3	6.9	14.3	22.4	7.7	18.3
March ..	17.7	12.0	17.2	17.4	25.3	19.8	17.2	9.2	13.2	17.5	13.7	16.5
April ..	36.4	14.5	34.4	20.0	27.0	22.0	14.9	20.1	17.5	28.3	20.8	26.3
May ..	31.8	12.8	30.2	29.5	24.9	28.2	19.1	4.8	11.7	28.7	10.2	23.9
June ..	22.9	13.6	22.2	22.2	20.8	21.8	21.1	11.3	16.1	22.4	10.6	20.1
Average (July, 61 to June 62)	25.5	9.5	24.2	24.1	24.0	24.0	15.8	12.9	14.3	23.0	15.2	20.8

STATEMENT 2.8

Estimated Separation Rate in Mica Mines During July, 1961 to June, 1962

Month	Bihar			Rajasthan			Residual			All India		
	Under-ground	Above-ground	Over-all	Under-ground	Above-ground	Over-all	Under-ground	Above-ground	Over-all	Under-ground	Above-ground	Over-all
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)	(xi)	(xii)	(xiii)
1961—												
July ..	16.0	4.8	15.0	24.6	20.8	23.3	22.6	16.3	19.4	19.5	16.1	18.5
August ..	20.1	9.1	19.2	24.8	27.1	25.6	13.4	13.0	13.2	19.6	16.1	18.4
September	24.8	7.2	23.5	26.8	13.7	22.1	16.0	12.9	14.3	23.2	12.5	20.0
October	27.5	5.6	25.8	36.3	27.6	32.7	17.9	11.1	14.2	26.7	15.0	23.0
November	21.7	8.3	20.6	24.5	30.1	26.7	11.4	14.8	13.2	19.6	18.0	19.1
December	20.8	3.8	19.4	21.2	32.6	25.3	7.5	15.7	11.6	17.5	18.8	17.9
1962—												
January	16.2	8.8	15.6	17.9	14.1	16.6	18.6	8.5	13.4	17.1	10.0	15.0
February	13.6	5.7	12.9	18.4	23.7	20.1	17.3	10.7	13.9	15.4	13.3	14.8
March ..	21.1	5.4	19.7	13.7	18.0	15.0	11.9	11.0	11.5	17.5	12.0	16.0
April ..	20.6	6.3	19.3	19.6	23.6	20.7	13.6	7.1	10.3	18.8	10.6	16.6
May ..	24.0	10.9	23.0	37.3	32.4	35.9	26.3	9.9	17.7	26.9	14.7	23.7
June ..	31.3	13.7	29.9	20.4	16.5	19.2	16.0	13.7	14.8	26.1	14.3	23.9
Average (July, 61 to June, 62)	21.7	7.6	20.6	23.4	23.2	23.3	16.0	12.0	13.9	20.8	14.2	18.0

Accession as well as separation rates were invariably higher in the case of underground workers than those employed aboveground, the over-all annual percentage of accessions and separations being of the order of 23 and 21 for underground workers and 15 and 14 for those employed aboveground respectively. In view of the fact that work underground is comparatively more arduous, workers were found to be leaving their jobs resulting in higher labour turnover.

An attempt was also made in the course of the Survey to collect data on separations by causes. Since most of the managements did not maintain records indicating separations by causes, no accurate statistics could be collected. However, on the basis of the version of the managements, some data pertaining to separations by causes were collected and the statistics are presented in the following Statement 2.9.

It will be seen from the above Statement that in the industry, as a whole, nearly 95 per cent. of the separations were due to quitting* of jobs by workers, discharge or dismissals accounted for only about 3 per cent., while retirement, death, etc., accounted for the rest. Regarding individual centres also, the position was, more or less, the same as given for the industry, as a whole, i.e., "quits" was the main cause of separations.

2.9. System of Recruitment

At the time when the Labour Investigation Committee conducted its Survey, it was found that labour force in mica mines was recruited through *Sardars* who were sent out with funds to villages in the vicinity. Sometimes, *Sardars* employed in one mine went to another mine and tried to tempt away workers of that mine by paying advances. In the case of those mines which were situated in *Zamindari* areas, their proprietors had no difficulty in recruiting labour. They used to make their recruitments known to their tenants and the latter invariably responded to the call of their master.

STATEMENT 2.9

Estimated Percentage Distribution of Separations by Causes in Mica Mines During July, 1961 to June, 1962

Causes	Bihar			Rajasthan			Residual			All India		
	Under-ground	Above-ground	Over-all	Under-ground	Above-ground	Over-all	Under-ground	Above-ground	Over-all	Under-ground	Above-ground	Over-all
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)	(xi)	(xii)	(xiii)
1. Discharge or Dismissals	2.2	1.1	2.2	5.2	9.7	6.7	†	..	†	2.5	4.0	2.8
2. Quits	..	94.4	92.3	94.3	94.8	90.3	93.3	99.1	99.5	99.5	95.3	95.3
3. Retirement, Death, etc.	3.4	6.6	3.5	..	..	..	0.9	0.5	0.5	2.2	0.5	1.9

*Indicates that the percentage was less than 0.05.

†Quits are termination of employments initiated by employees because of jobs elsewhere dissatisfaction, marriage, maternity, ill-health, unauthorised absences, etc.

The results of the present Survey, however, reveal that with the passage of time, old practices have undergone a considerable change. At the time of present Survey, about 89 per cent. of the workers in the industry in the country as a whole, were recruited direct by the managements at the mine itself. About 6 per cent. had been recruited through departmental heads. There was no specific category of workers recruited through departmental heads and the practice varied from mine to mine. Another roughly 3 per cent. of the workers had been recruited by the head office and such employees were generally managerial personnel, watch and ward and clerical staff, etc. The rest were recruited through *maistries*, jobbers, labour office or by proprietors themselves.

As among different centres, the position was that in the Residual Group almost all workers were recruited at the mines themselves. In Rajasthan, about 90 per cent. of the employees were recruited through this method and the rest through head office. In Bihar, different methods of recruitment were followed, the most important being recruitment at the mine's office and through departmental heads accounting for nearly 82 and 14 per cent. of the workers respectively.

2.10. Training and Apprenticeship

The Labour Investigation Committee had reported that there was no system of imparting training to workers in the Mica Mining Industry at that time. Only in some mines training was given for supervisory jobs. However, according to the present Survey, it is estimated that nearly 20 per cent. of the mica mines in the country were providing training facilities to their workers and everywhere schemes were on an *ad-hoc* basis.

There were no such schemes in Rajasthan. The position in respect of Bihar and Residual Group is discussed below:

Bihar : In this centre, about 29 per cent. of the managements stated that training arrangements existed for Mining Assistants, Shift Incharges and Electricians. It has, however, been reported that there were no training schemes for Mining Assistants as such and a doubt was therefore created whether they were designated as apprentices to justify payment of wages lower than those fixed under law. Except in the case of a few mines (1.5%) where training period was either not fixed or it was only for six months, everywhere else the period of training was 3 years. In about 70 per cent. of the mines providing training facilities, the trainees were paid remuneration ranging between Rs. 50 and Rs. 99.62 per month. In the rest, payment to trainees was made at the discretion of the managements. No educational qualifications for trainees were laid down in about 65 per cent. of the units, while others insisted that the candidates should at least be matriculates. A few mines gave preference to candidates who had undergone some training in institutes run by Government. None of the managements providing training facilities entered into any contract, written or verbal, with the apprentices nor did they guarantee employment to the trainees after successful completion of the training period.

Residual Group : In this Group, two mines, representing about 12 per cent. of the total, had provided training facilities. In one of them, training was imparted to fitters only and the facility was open to all. No educational qualifications were prescribed for persons desirous of undergoing training.

The period of training was 3 years and trainees were paid a remuneration of Rs. 2 per day. The unit guaranteed employment to the trainees after they had completed the training period successfully. In the other, training was given to drillers, engine *mazdoors*, survey boys and mining engineers. The period of training ranged between 6 months and 2 years depending upon the occupation. The qualifications prescribed were a pass in the S.S.L.C. examination for mining engineers. In the cases of survey boys and engine *mazdoors*, persons who had studied upto middle standard were admitted to the training. For drillers, all that was required was that the candidates should possess a good physique. Preference was, however, shown to persons who had already received some training in industrial institutes run by Government. The trainees were paid some remuneration. Some of them were monthly-paid and were getting Rs. 45 to Rs. 65 per month. Others were paid on a daily basis at rates ranging between Rs. 1.25 and Rs. 2 per day. The unit did not guarantee employment to the trainees.

CHAPTER III

WAGES AND EARNINGS

3.1. *Wage Revisions and Minimum Rates of Wages*

The Labour Investigation Committee which had conducted a wage census in some of the mica mines on a sample basis in 1944-45 observed that the level of wages in the industry was miserably low. Taking the over-all position into account, the basic minimum wage of an unskilled worker in the different centres of the industry at that time varied from annas 9 (Re. 0.56) to annas 12 (Re. 0.75) per day in the case of men workers and from annas 6 (Re. 0.37) to annas 8 pie 1 (Re. 0.51) in the case of women. Only one or two concerns in Bihar paid a separate dearness allowance at annas 2 (Re. 0.12) in the rupee. Since then the wage structure has been rationalised and regulated either as a result of adjudication awards or by bringing it within the purview of the Minimum Wages Act, 1948. In Bihar, which is the biggest centre of the industry, the wage rates were regulated by an Award of an Industrial Tribunal in 1948.

In 1960, the mica mines in Bihar were brought within the purview of the Minimum Wages Act and the rates fixed under the Act were enforced in November, 1960. The minimum daily wages of an unskilled worker were fixed at Rs. 1.53 if working aboveground and Rs. 1.63 if working underground. In Rajasthan, the minimum rates of wages were initially fixed under the Act in 1952. The rate fixed were Rs. 1.12 per day for men and Re. 0.75 per day for women, inclusive of dearness and all other allowances. Though the notification fixing the above rates was declared null and void by the State High Court in 1956 but these rates continued to be paid in most of the mines till 1959 when the minimum wage rates were refixed by the Rajasthan Government. The revised rates which were enforced from April, 1959, were Rs. 1.31 per day for unskilled workers, whether men or women. As regards mines in the Residual Group, the minimum wage rates under the Act came into force in May, 1960. The rates so fixed for unskilled men workers were Rs. 1.75 and Rs. 1.87 for aboveground and underground work respectively. In the case of women workers, the rate was Rs. 1.62 per day.

In order to study the changes in wage structure in the industry, information was collected from each sampled unit in respect of number of wage revisions which took place since 1956 affecting majority of workers and the methods followed for such revisions. On this basis, it is estimated that wage revisions took place once only in 94.9 per cent. of the total mica mines in the country since 1956. The remaining mines, which were all situated in Andhra Pradesh, came into existence after the minimum rates of wages had been fixed in that area. All the mines covered in the course of the Survey were found to be paying wages fixed by the respective State Governments under the Minimum Wages Act, 1948.

3.2. *Pay Period*

Data collected during the Survey show that out of the estimated total number of about 22 thousand workers employed in mica mines in the country, about 48 per cent. were paid wages once in a month, 34 per cent.

once in a week and the rest once in a fortnight. The following Statement 3.1 gives the estimated distribution of workers according to their pay period:

STATEMENT 3.1

*Estimated Distribution of Workers According to Their Pay Period—
June, 1962*

Centre	Percentage of workers whose pay period was		
	Month	Fortnight	Week
(i)	(ii)	(iii)	(iv)
1. Bihar	17.1	27.6	55.3
2. Rajasthan	100.0	..	..
3. Residual	64.9	13.1	22.0
4. All India	48.1	17.7	34.2

The above statistics reveal divergent practices with regard to pay period in the various centres of the industry. Whereas in Rajasthan, the only system of settlement of wages was once in a month, in Bihar the predominant system was weekly settlement of wages. In the Residual Group, about two-thirds of the workers received wages once in a month and the rest were paid once in a week or fortnight. Persons holding managerial, executive, administrative, professional, technical, clerical and other supervisory positions invariably received their wages once in a month in both Bihar and the Residual Group.

3.3. *Average Daily Earnings*

Since a detailed Occupational Wage Survey was conducted by the Bureau in 1958-59, no attempt was made during the course of the present Survey to collect data pertaining to earnings of workers by occupations. However, some statistics pertaining to earnings were collected for broad groups of workers, i.e., all workers (i.e., those covered under the Mines Act), all production workers (separately for men, women and adolescents), lowest-paid production workers employed direct as well as through contractors, clerical staff as also watch and ward and other related workers. In order to maintain comparability of the data, information relating to earnings was collected for one wage period immediately preceding 30th June, 1962.

3.3.1. *All Workers*—The following Statement 3.2. gives the details of earnings of all workers and production workers:

STATEMENT 3.2

Estimated Average Daily Earnings of Workers in Mica Mines During June, 1962

(In Rupees)

Centre				All workers *	Production Workers (employed direct)			
					Men	Women	Adolescents	All produc- tion workers
(i)				(ii)	(iii)	(iv)	(v)	(vi)
1. Bihar	..	..	..	2.37	2.25	..	..	2.25
2. Rajasthan	..	..	..	1.87	1.77	1.55	..	1.75
3. Residual	..	..	..	2.11	1.90	1.77	1.82	1.86
4. All India	..	..	..	2.19	2.04	1.75	1.82	2.01

*All workers deemed to be covered under the Mines Act, whether employed direct by the managements or through contractors.

In the industry in the country, as a whole, the average daily earnings of all workers were estimated at Rs. 2.19 in June, 1962. The average daily earnings varied from Rs. 1.87 in Rajasthan to Rs. 2.37 in Bihar.

3.3.2. *Production Workers*—Production workers engaged in mica mines in the country, as a whole, earned, on an average, Rs. 2.01 per day. The average daily earnings were the highest (Rs. 2.25) in Bihar, followed by the Residual Group (Rs. 1.86). The earnings were the lowest (Rs. 1.75) in Rajasthan. Men production workers invariably earned more than women because the latter were usually engaged on light and unskilled jobs.

It will be noticed from the Statement 3.2 that adolescents earned Rs. 1.82 per day which was more than the average daily earnings of women. The main reason for this was that in the sampled mine, where adolescents were found to be employed, they were being paid the same wages as fixed for adults which were higher than those fixed for women. As already mentioned, adolescents constituted a negligible proportion to the total employment in the industry.

Contract labour was found to have been engaged in a few mines in Bihar centre only and, wherever they were engaged, they were getting Rs. 1.63 per day.

3.3.3. *Lowest-paid Production Workers*—The following Statement 3.3 shows the earnings of workers employed in the lowest-paid occupations among production workers employed direct as well as those engaged through contractors.

STATEMENT 3.3

Estimated Average Daily Earnings of Lowest-paid Production Workers in Mica Mines During June, 1962

(In Rupees)

Centro	Employed direct			Employed through contractors			All lowest-paid workers		
	Men	Women	All	Men	Women	All	Men	Women	All
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)
1. Bihar	1.60	..	1.60	1.63	..	1.63	1.60	..	1.60
2. Rajasthan	1.53	1.55	1.53	..	..	..	1.53	1.55	1.53
3. Residual	1.85	1.70	1.81	..	..	..	1.85	1.70	1.81
4. All India	1.62	1.65	1.63	1.63	..	1.63	1.62	1.65	1.63

The lowest-paid workers earned, on an average, Rs. 1.63 a day in the industry, as a whole. Their wages were highest in the mines covered in the Residual Group (Rs. 1.81) and lowest in Rajasthan (Rs. 1.53). Contract labour was employed in a few mines in Bihar Centre alone and they were earning a little more than those employed direct. However, in all these mines, where both direct as well as contract labour was employed, they were found to be getting the same wages. It would also appear from the Statement that in the industry, as a whole, the average daily earnings of women workers came to Rs. 1.65 as against Rs. 1.62 for men workers. This is primarily due to the position obtaining in Rajasthan. The higher earnings of women in Rajasthan, in spite of the fact that their rates of payment were the same as for men doing same or similar job, is due to the fact that proportionately more women received wages for weekly offs than men.

3.3.4. *Earnings of Clerical and Watch and Ward and Other Related Employees*—The following Statement 3.4 shows the estimated average daily earnings of the clerical and watch and ward and other employees:

STATEMENT 3.4

Estimated Average Daily Earnings of Clerical Staff and Watch and Ward and Other Related Workers in Mica Mines During June, 1962

(In Rupees)

Centro	Clerical and Related Workers (including Supervisory)			Watch and Ward and Other Services		
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)
1. Bihar	4.04
2. Rajasthan	2.78
3. Residual	3.28

The average daily earnings of clerical and related employees were Rs. 3.67 at the all India level. The overall earnings of this group of employees were higher than those of all workers and all production workers.

As regards 'Watch and Ward and Other Services', they, on an average, earned Rs. 2.04 per day which compared well with the earnings of all workers and all production workers.

3.4. Components of Earnings

The following Statement 3.5 shows the earnings of all workers by various components in Mica Mining Industry:

STATEMENT 3.5

Estimated Average Daily Earnings by Components of All Workers in Mica Mines During June, 1962

(In Rupees)

Centre	Basic Earnings (i.e., basic wage and dearness allowance)	Production or incentive bonus	House rent allowance	Transport or conveyance allowance	Overtime pay	Food-grain concession	Other cash allowances	Others concessions in kind	Total
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)
1. Bihar ..	2.11 (89.0)	..	3.02 (0.9)	..	..	*	0.24 (10.1)	..	2.37 (100.0)
2. Rajasthan	1.86 (99.5)	..	*	*	..	*	0.01 (0.5)	..	1.87 (100.0)
3. Residual	2.11 (100.0)	..	..	..	..	*	*	*	2.11 (100.0)
4. All India	2.06 (94.1)	..	0.01 (0.4)	*	..	*	0.12 (5.5)	*	2.19 (100.0)

(Figures in brackets are percentages to total in col. (x).)

*Indicates that the amount was less than Rs. 0.005.

3.4.1. *Basic Earnings*—Data collected during the Survey indicate that basic earnings, i.e., basic wage and dearness allowance (wherever paid separately) or consolidated wages, constituted nearly 94 per cent. of the total earnings of all workers in the Mica Mining Industry in the country, as a whole. Basic earnings constituted the sole component in the Residual Group and almost whole of the total earnings in Rajasthan. In Bihar, they accounted for 89 per cent. of the total earnings.

The system of paying a separate dearness allowance was in vogue in nearly 51 per cent. of the mica mines in the country. Among individual centres of concentration, it was widely prevalent in Bihar where nearly 77 per cent. of the mines were found paying a separate dearness allowance. In Rajasthan, the system of paying dearness allowance was not reported in any of the sampled mines. In the Residual Group, only one

large mine reported the practice of paying dearness allowance. Details of dearness allowance paid in Bihar and the Residual Group are discussed below :

Bihar : There was no uniformity in the method of payment of dearness allowance in this centre. Whereas many of the mines paid dearness allowance at a flat rate ranging from Rs. 15 to Rs. 67 per month to the different categories of workers, a few others paid dearness allowance as a percentage of basic wage of the workers. In certain cases, there were no fixed rates and the managements paid dearness allowance at their discretion. In most of the mines, monthly-rated production and other workers as also clerical, technical and managerial personnel were getting dearness allowance. Nowhere payment of dearness allowance was linked to Consumer Price Index Number.

Residual : As already stated, the system of paying a separate dearness allowance was in vogue only in one sampled unit. In this unit, only "Face Dressers" and "Drillers" received dearness allowance, the amount of dearness allowance being Rs. 5 and Rs. 11 per month respectively.

3.4.2. House Rent Allowance—The practice of paying house rent allowance to workers was prevalent in almost all the mines covered in Bihar and in about 12 per cent. of the mines in Rajasthan. Such a system did not exist in the mines covered in the Residual Group. In Bihar, this allowance was usually paid to all categories of workers at the rate of Rs. 4 per month provided they worked for at least 20 days in a month. In a few stray cases, house rent allowance was paid at a higher rate to supervisory and administrative personnel. In Rajasthan, it was given to managers only and the rate of payment was Rs. 6 per month.

This component formed a very small proportion to the total daily earnings of all workers.

3.4.3. Transport or Conveyance Allowance—The system of paying transport or conveyance allowance was noticed in one sampled mine in Rajasthan only. The allowance was paid to only the manager and the clerk of the unit. This item constituted a very insignificant proportion of the total daily earnings of all workers in the industry.

3.4.4. Other Cash Allowance—This group consists of several items such as monthly bonus, rice allowance, fuel allowance, gun allowance, first-aid allowance, underground allowance, water allowance, servant allowance, special allowance, cook allowance, efficiency allowance, etc. These items constituted 5.5 per cent. of the total daily earnings of all workers in the industry in the country, as a whole. Such allowance were mostly being paid in Bihar. In Rajasthan, only fuel allowance, servant allowance and water allowance were being paid. In the Residual Group, only food-grain concession allowance was being paid. Since the quantum of these allowances varied as between the different centres of the industry, the rate of payment, etc., is discussed separately for each centre at the appropriate places.

Monthly Bonus : Payment of monthly bonus to workers in mica mines in Bihar is regulated by an award of the Industrial Tribunal. The Survey results show that it was prevalent in all the mines covered in Bihar

or about 65 per cent. of the total mines in the country, as a whole. According to the prevailing practice, all daily-rated workers who put in a minimum attendance of 20 days during a month, were entitled to this bonus at the rate of $12\frac{1}{2}$ per cent. of basic wage (or Re. 0.12 per rupee of basic wage) earned during the month. In stray cases, monthly bonus was also paid to certain monthly-rated employees such as godown clerks at the rate of Rs. 3.31 per month at the discretion of the management.

Foodgrain Allowance : The practice of paying rice allowance was found in about 93 per cent. of the mica mines in Bihar or about 61 per cent. of the total mines in the country, as a whole. In most of the mines, all production workers, irrespective of the fact whether they were monthly-rated or daily-rated, were paid this allowance at the rate of Re. 0.25 per day worked. Monthly-rated staff, like clerks were also in receipt of this allowance at the same rate as applicable to production workers. In a few mines, the rate ranged from Rs. 5.62 to Rs. 7.50 per month in the case of monthly-rated staff, e.g., production supervisors, managers, Watch and Ward, shift-in-charge and clerical staff. In all cases, deductions were made for the days of absence.

Similarly, the practice of giving foodgrain concession allowance was noticed in two sampled mines in the Residual Group. All workers, whether daily-rated or monthly-rated, were paid this allowance at the rate of Re. 0.12 per day worked.

Fuel Allowance : Fuel allowance was being paid in only one of the sampled mines in Bihar and nearly 25 per cent. of the mines in Rajasthan. In the Bihar unit, such an allowance was given to administrative supervisors at the rate of Rs. 10 per month and no conditions were attached to the payment. In Rajasthan, monthly-rated staff, managers and watch and ward employees were paid this allowance. The rate of payment varied from Re. 1 per month in the case of watch and ward staff to Rs. 5 per month in the case of managers. However, daily-rated production workers did not get any such allowance.

Gun Allowance : Only a few sampled mines in Bihar, comprising about 15 per cent. of the total, reported payment of this allowance. In these units, it was paid at the rate of Rs. 2.50 per month to gunmen and no qualifying conditions were attached to the payment.

First-aid Allowance : First-aid allowance at the rate of Rs. 2 per month was allowed to the trained first-aiders and managers in about 20 per cent. of the mines covered only in Bihar.

Underground Allowance : Only a few sampled mica mines in Bihar, comprising about 11 per cent. of the total, reported payment of such an allowance to managers only. The rate of payment was Rs. 5 per month.

Water Allowance : The practice of paying water allowance at the rate of Rs. 30 per month to the managers was noticed in three sampled mines in Bihar. In Rajasthan, water allowance was paid to a store clerk in one unit at the rate of Rs. 4 per month at the discretion of the management. Thus, the percentage of mines paying water allowance is estimated to be about 5 for the industry, as a whole.

Servant Allowance : Servant allowance was generally paid to the administrative personnel at rates ranging from Rs. 16 to Rs. 30 per month. The practice was in vogue in four sampled mines in Bihar or about 7 per cent. of the mines covered in this centre. In Rajasthan, it was paid at the rate of Rs. 20 per month to the manager in one sampled mine.

Special Allowance : The practice of paying certain special allowances at the discretion of management to some selected categories of supervisory personnel was found to be in vogue in nearly 31 per cent. of the mines in Bihar or about 20 per cent. of the mines in the country, as a whole. There was no fixed rate and no conditions were attached to the payment. In most of the units, the amount was included in the consolidated wages of the concerned employees.

Cook Allowance : This allowance was paid to the monthly-rated staff at the rate of Rs. 5 per month in about 13 per cent. of the mines covered in Bihar.

Efficiency Allowance : This practice was noticed in only one sampled mine in Bihar. In this case, the shift-in-charge, received an efficiency allowance at the rate of Rs. 44.75 per month and the manager Rs. 175 per month. Deductions were, however, made for the days of leave and absences.

Quarterly Bonus : The practice of paying quarterly bonus to workers was in vogue in mica mines in Bihar. The qualifying conditions, rate of payment, etc., were regulated by awards of the two Industrial Tribunals, Dhanbad in 1948 and 1953. Data collected during the course of the Survey show that the system of paying quarterly bonus was prevalent in all the sampled mica mines in Bihar or about 65 per cent. of the mines in the country, as a whole. Details of the categories of workers covered and conditions attached for the payment are given below:

Serial No.	Categories of employees	Qualifying conditions	Rate of payment
(i)	(ii)	(iii)	(iv)
1.	Production Workers (daily-rated underground)	Minimum of 45 days' attendance during the quarter.	7 days' basic wages.
2.	Production Workers (daily-rated surface).	Minimum of 57 days' attendance during the quarter.	Do.
3.	Monthly-rated Workers (under-ground).	Minimum of 45 days' attendance during the quarter.	Half basic wages.
4.	Monthly-rated workers (surface)	Minimum of 57 days' attendance during the quarter.	Do.
5.	Clerical, watch and ward employees, managerial and other supervisory personnel.	Do.	Do.

3.5. *Annual Bonuses*

None of the mica mines covered in the Survey reported the existence of any profit-sharing or festival bonus scheme. But the system of paying year-end bonus was found to be in vogue in about 19 per cent. of the total mines in the country, as a whole. This percentage is composed of about 5 per cent. of the sampled mica mines in Bihar, 15 per cent. in Rajasthan and all in the Residual Group. All the mines in Bihar had the schemes on a regular basis, elsewhere they were only *ad-hoc*.

Of the mines paying bonus, in about 35 per cent. the bonus was being paid at the discretion of the managements while in the rest it was paid as a result of adjudication awards. All the mines where bonus was paid on the basis of adjudication awards were located in the Residual Group. With the exception of Bihar centre where bonus was paid to the monthly-rated staff, elsewhere it was paid to all employees. No conditions to the payment of bonus were prescribed in Rajasthan centre. In other centres, workers putting a certain minimum specified period of service were entitled to receive bonus. As regards rate of bonus, in Bihar, one month's pay (excluding rice allowance and house rent) was given. In Rajasthan, the rate was 1/24th of basic wages earned during the year. In the Residual Group, it varied from 1/20th to 1/24th of the total wages earned during the year. In one of the mines in this centre, monthly-rated employees were being given 2 months' wages as bonus during a year. Everywhere, payment was made in cash.

3.6. *Fines and Deductions*

The system of imposing fines or making deductions was not reported from any of the sampled mines visited during the course of the Survey.

CHAPTER IV

WORKING CONDITIONS

4.1. Shifts

When the Labour Investigation Committee conducted their enquiry in 1944-45, they found that most of the mica mines in Bihar were working double-shifts whereas in Madras, the system of working one shift was more in vogue. The Committee did not make any mention of the number of daily shifts worked in mica mines located elsewhere. The present Survey has shown that about 30 per cent. of the mica mines in the country worked only one shift, 41 per cent. two shifts, 28 per cent. three shifts and the rest had four shifts a day. Majority of the mines in Bihar and the Residual Group worked two shifts a day, while in Rajasthan three shift working was more popular. The system of working four shifts a day was confined to the Residual Group only. The following Statement 4.1 gives the details:

STATEMENT 4.1

Estimated Percentage Distribution of Mica Mines According to Number of Shifts Worked in 1962-63

Centre	Number of mines	Percentage of mines working				Percentage of mines having night-shifts*
		One shift	Two shifts	Three shifts	Four shifts	
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)
1. Bihar	251	38.9	40.6	20.5	..	41.5
2. Rajasthan	87	19.2	33.5	47.3	..	56.6
3. Residual	47	5.8	53.6	29.0	11.6	17.4
4. All-India	385†	30.4	40.6	27.6	1.4	42.0

*For the purposes of the Survey, a night-shift was treated as one whose majority of working hours fell between 10 P.M. and 6 A.M.

†The total number of mines given here does not tally with that given in Statement 1.3 (col. ii). The difference is due to the fact that only those mines which continued to exist till the time of the Survey were covered.

It will be seen from the above Statement that 42 per cent. of the mines in the country were reported to be working night-shifts. The proportion of such mines was the highest in the case of Rajasthan (57%) and lowest in the Residual Group (17%). No amenities, whatsoever, were provided to night-shift workers in about three-fourths of the mines working night-shift. In the rest, night-shift workers were supplied kerosene oil to enable them to use lanterns on their way back home.

About 40 per cent. of the mica mines in the country had a regular system of transferring workers from one shift to another. The proportion of such mines was 43 per cent. in Bihar, 14 per cent. in Rajasthan and 71 per cent. in the Residual Group. The interval after which such a change-over was made was a week in about 92 per cent. of the mines and a month in the rest.

4.2. Hours of Work

According to the Labour Investigation Committee, in Bihar, the hours of work for underground workers during 1944-45 were 8 without any recess. For surface workers, the hours of work were 10, with one hour's rest. In Madras, the hours of work for both the categories of workers were 9 with one hour's rest-interval. Since the passing of the Mines Act, 1952, the daily hours of work for adult workers have been fixed at a maximum of 9 in the case of surface workers and 8 for underground workers, the weekly hours being 48 in both cases. The Chief Inspector of Mines has been empowered to grant exemption from the above limit of daily hours of work to facilitate the change-over in any mine. The position as revealed by the present Survey is given in the following Statement 4.2:

STATEMENT 4.2

Estimated Number of Workers Granted Earned Leave with Pay During Work—1962-63

Centre	Number of mines	Estimated percentage of mines where daily hours of work for majority of workers were					
		Adults			Adolescents		
		Less than 8	Equal to 8	More than 8	Less than 8	Equal to 8	More than 8
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)
1. Bihar ..	251						
(a) Surface ..	..	35.5	64.5	..	..	..	..
(b) Underground ..	..	12.9	87.1	..	..	..	..
2. Rajasthan ..	87						
(a) Surface ..	..	..	100.0	..	..	..	..
(b) Underground ..	..	..	100.0	..	..	..	..
3. Residual ..	47						
(a) Surface ..	..	..	100.0	..	..	100.0	..
(b) Underground ..	..	..	100.0	..	..	..	..
4. All India ..	385						
(a) Surface ..	..	22.7	77.3	..	..	100.0	..
(b) Underground ..	..	9.4	90.6	..	..	..	..

It would appear from the Statement that in the case of both underground and surface workers, the daily hours of work were either 8 or even less than 8. Nowhere, weekly hours of work exceeded 48. All mica mines covered in Rajasthan and the Residual Group were working 8 hours a

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day. Contract labour was employed in only a few mines in Bihar and they were also observing the same hours of work as direct labour. Adolescents, whenever employed, were also working 8 hours a day. In the case of night-shifts, also, workers were found to be working 8 hours in all the mines having night-shifts.

In the case of underground workers, the daily spread-over was up to 8 hours in almost all mines. Only in one mine covered in the Residual Group, it was 9 hours for majority of production workers and it is not known whether the management had obtained exemption from the competent authority in this respect. For surface workers, however, the spread-over was up to 9 hours in about 96 per cent. of the mines and more than 9 hours in the rest. The latter were all located in Bihar. The following Statement 4.3 gives details regarding the spread-over and periods of rest-interval in mica mines.

STATEMENT 4.3

Estimated Distribution of Mica Mines According to Spread-over and Rest-interval—1962-63

Centre	Number of mines	Estimated percentage of mines where							Timings were observed	
		Spread-over for adult workers was			Rest-interval for adult workers was					
		Up to 8 hours	More than 8 but up to 9 hours	More than 9 hours	Up to $\frac{1}{2}$ hour	More than $\frac{1}{2}$ but up to one hour	More than one hour	No fixed rest interval		
		(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)		(viii)	(ix)	(x)
1. Bihar ..	251									92.6
(a) Surface ..		82.2	12.1	5.7	37.9	9.8	5.6	46.7		
(b) Underground		100.0	..	..	7.6	5.3	..	87.1		
2. Rajasthan	87									100.0
(a) Surface ..		33.0	67.0	..	14.8	52.2	..	33.0		
(b) Undergound		100.0	..	..	..	..	..	100.0		
3. Residual	47									100.0
(a) Surface ..		..	100.0	..	11.6	88.4	..	..
(b) Underground		94.2	5.8	..	..	5.8	..	94.2		
4. All India	385									95.2
(a) Surface ..		60.3	36.1	3.6	29.2	29.6	3.6	37.6		
(b) Underground		99.2	0.8	..	5.5	4.7	..	89.8		..

It will be seen from col. (ix) of the Statement that in about 38 per cent. of the mines having surface working and 90 per cent. having underground work, there was no fixed rest-interval. However, managements of some of the mines in question having only surface operations stated that they allowed some interval to workers by rotation for taking meals.

Wherever contract labour was engaged, the period of rest-interval was less than half an hour for underground workers and between half an hour to one hour for surface workers. Adolescents also enjoyed rest-interval between half an hour to one hour.

The compliance with the provisions of the law concerning observance of the timings of work was also found to be quite satisfactory. In the country, as a whole, only in about 5 per cent. of the mines it was noticed that the normal timings were not strictly adhered to.

4.3. Conservancy

The Labour Investigation Committee had found that latrine and urinal facilities had not been provided by any of the mica mines visited by them. Even mines employing 1,000 workers had not made any such arrangement. Since then, the Mines Act, 1952, has made it obligatory for every mine to maintain an adequate number of latrines and urinals for the use of workers, separately for men and women and has laid down the specific scale and standards of such arrangements.

On the basis of the information gathered in the course of the present Survey it is estimated that in 1962-63 about 70 and 15 per cent. of the mica mines in the country, as a whole, had provided latrines and urinals respectively. The following Statement 4.4 gives details relating to conservancy arrangements provided in mica mines.

STATEMENT 4.4

Conservancy Arrangements in Mica Mines in 1962-63

Centre	Number of mines	Estimated percentage of mines										
		Providing		Where latrines were of					Pro- viding water taps near lava- scree- tories needed	Employ- ing women and having separate arrange- ments for them*		
		Lat- rines	Uri- nals	Water-borne			Dry type					
				Sewers	Septic tanks	Bore hole	Pan	Other types				
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)	(xi)	(xii)	
1. Bihar	..	251	59.6	10.4	..	..	10.0	57.2	32.8	..	56.2	20.0
2. Rajasthan	..	87	85.7	38.4	..	..	22.4	77.6	..	..	100.0	40.3
3. Residual	..	47	100.0	..	..	17.4	65.2	..	17.4	5.8	88.4	63.3
4. All India	..	385	70.5	15.4	..	3.0	23.0	52.9	21.1	1.0	73.8	47.4

*The percentages relate to mines providing latrines as also employing women.

It will be seen from the Statement that all the mines in the Residual Group had provided latrines as against 86 per cent. in Rajasthan and 60 per cent. in Bihar. The arrangements made were, however, generally of old type as only about 17 per cent. of the factories in the Residual Group or 3 per cent. in the country, as a whole, had water-borne septic tanks.

Only about 47 per cent. of the mines employing women had made separate arrangements for them. About three-fourths of the mines had complied with the provision of the law in regard to proper screening of latrines. However, very few mines had provided taps near lavatories.

The position in regard to urinals, however, was not so good as only 15 per cent. of the mines in the country had provided them. Not a single mine covered in the Residual Group provided this facility.

About 45 per cent. of the mines providing latrines and 65 per cent. providing urinals had put up permanent structures. Similarly, about 62 per cent. of the mines providing urinals and 38 per cent. providing latrines had plastered walls. In the remaining cases, walls were tarred and impervious or mixed, i.e., plastered as well as tarred and impervious. Only in about one-third of the mines, the sanitary condition of privies was found to be satisfactory.

4.4. *Leave and Holidays With Pay*

In the year 1944-45 when the Labour Investigation Committee conducted their enquiries, it was found that the practice of granting paid holidays to employees was not very popular in the industry. Since then, there has been a considerable improvement in this direction. The Mines Act which was passed in 1952 provided for the grant of only annual leave (earned leave) with pay to mine workers but either as a result of convention or as a consequence of agreements or adjudication awards the system of granting various types of leave and holidays with pay has now come into vogue in a fairly large number of mica mines in the country. The following Statement 4.5, based on the data collected during the present Survey, shows the prevailing practice in regard to granting of leave and holidays with pay in mica mines in the country.

STATEMENT 4.5

Estimated Percentage of Mica Mines Granting Various Types of Leave and Holidays With Pay—1962-63

Centro			Number of mines	Estimated percentage of mines granting			
				Earned leave (i.e., annual leave)	Casual leave	Sick leave	National and festival holidays
(i)			(ii)	(iii)	(iv)	(v)	(vi)
1. Bihar	..	..	251	100.0	69.5	73.1	100.0
2. Rajasthan	..	..	87	100.0	19.7	19.7	100.0
3. Residual	..	..	47	100.0	34.8	11.6	100.0
4. All India	..	..	385	100.0	54.0	53.5	100.0

4.4.1. *Earned Leave*—From the report of the Labour Investigation Committee, it would appear that, at the time of their enquiry, only one mine in Bihar was allowing 30 days' earned leave with pay in a year to its monthly-paid staff after completion of 12 months' satisfactory service. The present Survey has revealed that all mica mines in the country were granting earned leave with pay to their employees. They were, generally, following the provisions of the Mines Act, 1952 in regard to period of leave, qualifying conditions, rate of payment, etc.

In order to obtain a precise picture of the extent of benefit actually enjoyed by workers, statistics were collected about the number of workers who availed of leave during 1961 and the extent of leave enjoyed by them. The following Statement 4.6 shows the estimated average daily number of workers employed in the industry in 1961 and the number of workers who enjoyed leave according to the number of days availed.

STATEMENT 4.6

Estimated Distribution of Mica Mines According to Daily Hours of 1961

Centre	Estimated average daily number of workers employed in 1961	Estimated number of workers who enjoyed leave in 1961	Estimated percentage of workers who enjoyed leave to the total employed	Estimated percentage distribution of workers who enjoyed leave by period of leave						
				Up to 5 days	6 to 10 days	11 to 15 days	16 to 20 days	21 to 25 days	26 to 30 days	Over 30 days
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)	(xi)
1. Bihar ..	8,487	1,816	21.4	31.0	15.5	18.3	13.7	4.7	8.3	8.5
2. Rajasthan	4,129	2,551	61.8	24.7	27.1	38.6	5.6	1.9	1.4	0.7
3. Residual	4,874	1,622	33.3	19.1	8.3	47.5	19.0	4.1	1.2	0.8
4. All India	17,490	5,989	34.2	25.1	18.5	34.9	11.7	3.3	3.4	3.1

NOTE—In two mines in Bihar, information was available for the financial year 1961-62.

The statistics show that about 34 per cent. of the workers in the industry, as a whole, availed of earned leave with pay during 1961. The proportion of workers who enjoyed leave during 1961 was about 21 per cent. in Bihar, 62 per cent. in Rajasthan and 33 per cent. in the Residual Group. Of those, who availed themselves of leave during 1961, 78.5 per cent. enjoyed it up to 15 days. In about 53 per cent. of the mica mines in the country, it was found that workers were paid wages *in lieu of* leave earned by them at the end of the year, and they did not actually avail of the leave. The percentage of such mines was the highest in the Residual Group (71 per cent.) and the lowest in Rajasthan (30 per cent). In Bihar, it was about 58,

4.4.2. *Casual Leave*—The Labour Investigation Committee had observed that, of all the mines surveyed by them, the system of granting casual leave with pay existed in only two and in both it was given to only monthly-rated staff. In one, the number of casual leave allowed was 15 days in a year. In the other, it was a matter of discretion with the management. However, the present Survey has revealed that 54 per cent. of the mines in the country, as a whole, had the system of granting casual leave with pay to their employees*. Of the mines granting casual leave, about 82 per cent. allowed it up to 10 days in a year and 16 per cent. 11 to 15 days in a year. In the rest, the period of leave was not fixed and was at the discretion of the management and all such mines were located in the Residual Group. As regards the category of workers entitled to casual leave, it was reported that in Rajasthan this facility was given to all employees while in Bihar to monthly-rated workers only. In the Residual Group, in about one-third of the mines it was allowed to all workers and in the rest, to a few categories of workers alone. Generally, the condition attached, if any, in the case of Bihar and Residual Group was that worker should have completed a certain period of continuous service. No such condition was attached in the mines surveyed in Rajasthan. Workers were generally paid normal wages for the leave period.

4.4.3. *Sick Leave*—According to the Labour Investigation Committee, in 1944-45 only two mica mines (one each in Bihar and Madras) granted sick leave with pay to their monthly-paid staff. It was one month in a year in one mine and in the other, the days allowed were at the discretion of the management. The present Survey has revealed that nearly 73 per cent. of the mica mines in Bihar, 20 per cent. in Rajasthan and 12 per cent. in the Residual Group allowed sick leave with pay to their employees. They constituted 53.5 per cent. of all the mica mines at the all India level (Statement 4.5). Barring mines in the Residual Group, where this benefit was restricted to permanent employees only, in other centres it was given to all monthly-rated workers who had put in a prescribed period of service. The number of days allowed in mines covered in Rajasthan was 15 in a year. In Bihar and the Residual Group, the period of sick leave varied from unit to unit and ranged between 3 to 15 days in a year. In Rajasthan, if a worker so desired, he could take 30 days' sick leave on half pay instead of 15 days' on full pay. A few mines surveyed in Bihar and the Residual Group insisted on the production of a medical certificate or admission in the hospital before sick leave was sanctioned. Everywhere, workers were paid full wages for the period of leave.

4.4.4. *National and Festival Holidays*—The Labour Investigation Committee had reported that only one mine in Bihar granted 3 holidays in a year during *Puja* festival to its daily-rated employees. The results of the present Survey show that the system of granting national and festival holidays with pay was found to be quite wide-spread in the industry throughout the country as all the sampled mines were found granting such holidays to all of their employees. There was, however, no uniformity in regard to the number of days allowed and they varied from centre to centre and ranged between 2 and 11 days in a year. Such holidays were generally 7 to 11 days in a year in the case of mines in the Residual Group, 6 to 7 in the case of Rajasthan and 2 to 8 in the case of Bihar. The qualifying condition gene-

rally prescribed for the grant of the national and festival holidays with pay was that a worker should be present on the preceding and/or succeeding working day(s). In general, no condition was attached in the case of monthly-rated employees. Workers were paid normal wages for the leave period.

4.4.5. *Weekly Off*—All the mines throughout the country were found to be complying with the provisions of the law in regard to the grant of weekly off to their employees. However, except in the case of monthly-rated staff, such offs were without pay. In a few cases, even the daily-rated workers were entitled to payment for the weekly off provided they had worked for all the 6 days of the week or were not on unauthorised absence even for a day in the concerned week. In a few mines covered in Bihar, it was reported that the managements insisted on the presence of workers on the day preceding the off for entitlement to payment.

CHAPTER V

WELFARE AND AMENITIES

Welfare activities undertaken by employers and various amenities provided to workers fall under two distinct categories viz., (a) obligatory, i.e., those prescribed under the Mines Act, 1952, and (b) voluntary, i.e., those which are not statutory but are being provided by employers of their own accord as a moral obligation or in a spirit of benevolence. Details collected during the Survey relating to both the types of facilities are discussed in the following paragraphs:

(A) OBLIGATORY

5.1. *Drinking Water Facilities*

According to the findings of the Labour Investigation Committee, generally, no proper arrangements existed for the supply of drinking water to workers employed in mica mines. Generally, women were employed to fetch water from the nearest available source which was often a stagnant pool. Only a few big concerns arranged to carry clean water on lorries/ bullock carts to some of their more accessible mines.

As a result of the enactment of the Mines Act, 1952, it has now been made obligatory for every mine to make effective arrangements to provide and maintain, at suitable points conveniently situated, a sufficient supply of cool and wholesome drinking water for all persons employed therein. The present Survey has revealed that all the mica mines surveyed in the country had provided drinking water facilities. However, the type of arrangements made varied from centre to centre as will be evident from the following Statement 5.1.

STATEMENT 5.1

Drinking Water Facilities Provided in Mica Mines (1962-63)

Centre	Number of mines	Estimated percentage of mines where drinking water facility existed	Estimated percentage of mines where water was supplied through							Estimated percentage of mines having arrangements for cool water in summer
			Refrigerators/ Mechanical water coolers	Earthen pitchers only	Earthen drums and buckets, etc.	Tube wells, wells, hand pumps	Taps only	Taps and tubs	Others	
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)	(xi)
1. Bihar	251	100.0	..	83.3	8.1	7.2	..	..	1.4	94.3
2. Rajasthan	87	100.0	..	100.0	..	..	..	..	..	100.0
3. Residual	47	100.0	..	5.8	53.6	..	11.6	5.8	23.2	17.4
4. All India	385	100.0	..	77.6	11.8	4.7	1.4	0.7	3.8	86.2

It is estimated that in the industry, as a whole, about 78 per cent. of the mica mines had earthen pitches only. In Rajasthan, only earthen pitchers had been kept for the purpose. None of the mines had mechanical coolers. The condition of earthen pitchers/drums was not clean in about 26 per cent. of the units keeping them. About 86 per cent. of the mica mines in the country stated that they made special arrangements for supplying cool drinking water to workers during summer months. However, every where such arrangements were made in the shape of earthen pitchers. Nowhere the drinking water points were reported to be situated within the prohibited distance, i.e., within 20 feet from washing places, urinals or latrines.

5.2. *Washing and Bathing Facilities*

It is not obligatory for mine managements in the country to provide washing facilities to their workers. The law also does not require the provision of bathing facilities, except in the case of coal mines. Nevertheless, about 15 per cent. of the mica mines in the country had made provision for washing facilities. None of the mines covered in Rajasthan had provided any washing facilities while the proportion of mines providing them was nearly 15 per cent. in Bihar and 41 per cent. in the Residual Group. In a majority of the cases (i.e., 84 per cent.), they were in the form of 'water stored in receptacles'. In the rest, either 'troughs with taps or jets' or 'wash basins with taps' or well water was provided for the purpose. Nowhere separate arrangements existed for women workers. Of the mines having washing arrangements, about 28 per cent. supplied some cleansing material also. Nearly 83 per cent. of them supplied soap only while the rest supplied soap as well as towels.

Only two mines covered in the Residual Group had provided bathing facilities. One of them had also made separate arrangements for women workers. In both the mines, bath-rooms were reported to be clean.

5.3. *Lockers*

Mica mines in the country are not under any statutory obligation to provide lockers and none had provided them either.

5.4. *Canteens*

None of the mica mines visited by the Labour Investigation Committee during 1944-45 had provided any canteen for its workers. However, under the Mines Act, 1952, only those mines which employ 250 or more persons are ordinarily required to maintain canteens for the use of the workers. The standards of canteens have also been prescribed in the rules framed under the Act.

Information collected during the Survey shows that only three mines in the Residual Group comprising nearly 17 per cent. of the mines in this centre (or 2 per cent. in the country) were under a statutory obligation to provide canteens. But only two of them were found to have complied with the provision of the law. Canteens in both sold tea, coffee and snacks. One of them was run by the management on a 'no-profit, no-loss' basis while the other was run by a contractor and the items were sold at market rates. In both, prices were fixed by the management. Price list was not found to have been displayed in any of the canteens. Neither of them had any Canteen Managing Committee.

Location and hygienic conditions of the canteens in both the units were found to be good or satisfactory. Both of them had also provided proper drinking water facilities. Judging from the proportion of employees patronising the canteens, it was found that they were not popular at all as, on an average, only about 13 per cent. of workers were visiting them daily.

None of the other mines covered during the Survey had provided canteens, presumably because they were not required to do so under law.

5.5. *Rest Shelters*

The existence of rest-shelters for the workers was reported by the Labour Investigation Committee in a few units in Madras only. According to the Rules framed under the Mines Act, 1952, every mine employing 150 or more workers must provide adequate and suitable rest-shelters at or near loading wharves, open-cast working, work-shops and mine entrances where 25 or more persons are ordinarily employed at any time, for taking food or rest. Those mines which maintain canteens of the prescribed standard are, however, exempted from maintaining rest-shelters.

It is estimated that nearly 12 per cent. of mica mines in the country, as a whole, employed 150 or more workers and were, thus, under an obligation to maintain rest-shelters of the prescribed standards. All such mines had duly complied with the law. In addition to these, nearly 49 per cent. of the mines, which were not under any statutory obligation, also stated that they had provided rest-shelters. Thus, it is estimated that the percentage of mines providing rest-shelters was 61 in the country, as a whole. In only about 8 per cent. of the mines having rest-shelters, they were in conformity with the prescribed standards inasmuch as they were reported to be sufficiently lighted, ventilated and maintained in a tidy condition. They also provided adequate protection against bad weather. In the rest, one or the other deficiency, such as improper protection from weather, lack of drinking water facilities and sufficient light, etc., was noticed. In most of these cases the rest-shelters were bamboo structures with thatched roofs or tin.

5.6. *Creches*

The Labour Investigation Committee had made no mention of the existence of creche facilities in any of the mica mines surveyed by them. The Mines Act, 1952, requires every mine to maintain a creche for the use of children, below the age of six, of women workers. The Mines Creche Rules prescribed the standard of construction of creche buildings and items to be supplied to children attending them.

The Survey results show that about 28 per cent. of mica mines in the country employed women. Of these, only about 17 per cent. had maintained creches. All such mines were located in the Residual Group. It was also observed that of the mines providing creches, about 57 per cent. supplied toys to children, 14 per cent. clothes, 43 per cent. soap, towels, milk and refreshments.

5.7. *Medical Facilities*

The Labour Investigation Committee had found that only a few big mines in Bihar and Rajputana had made rudimentary arrangements for providing medical aid to their employees. Even first-aid boxes had not been maintained by most of the mica mines in Bihar and Madras which were

surveyed by the Committee. Only one firm in Bihar had a hospital of its own, though with insufficient equipment of drugs and apparatus. Medical aid, wherever provided, was free.

The medical facilities available to workers engaged in Mica Mining Industry at the time of the present Survey are discussed below:—

5.7.1. First-Aid Boxes—The Mines Rules require every employer to maintain first-aid boxes at a prescribed scale and containing the prescribed contents. The Survey results have shown that, with the exception of one of the mines covered in Bihar, all others maintained first-aid boxes. However, only about 15 per cent. of them kept the prescribed contents. Barring a few mines, everywhere first-aid boxes were readily accessible. The law further requires that such boxes should be kept under the charge of trained first-aiders. But the Survey results indicate that, except about 8 per cent. of the mica mines (all of which were located in Bihar), all others had complied with this requirement. In all these mines, the trained first-aiders were holding diploma of the St. John Ambulance. One of the mines had also provided a first-aid station.

5.7.2. Ambulance Rooms—The Mines Rules impose responsibility on the employers to provide and maintain ambulance rooms, if they employ more than 500 workers. None of the mica mines covered in the Survey employed the required number of workers and, hence, none was under any legal obligation to maintain an ambulance room. However, two sampled mines, one each in Bihar and the Residual Group, were reported to be maintaining ambulance rooms. Neither of them employed any qualified doctor for the ambulance room.

5.7.3. Other Medical Facilities—Except for first-aid boxes and ambulance rooms, the law does not require employers to provide any other medical facility. However, about 4 per cent. of the mines in Bihar had a contract with some dispensary or hospital for the treatment of their workers. In about 6 per cent. of the mines in the country, as a whole, workers were receiving treatment from the dispensaries and hospitals set up under the Mica Mines Labour Welfare Fund. In a few cases, managements stated that they distributed patent medicines among workers.

(B) NON-OBLIGATORY

5.8. Recreation Facilities

Arrangements for the entertainment and recreation of workers employed in the Mica Mining Industry were almost non-existent at the time when the Labour Investigation Committee conducted their enquiry in 1944-45. However, in the course of the present Survey it is estimated that 2.5 per cent. of the mica mines in the country, as a whole, had made arrangements for recreation of their employees in the form of in-door games, out-door games, radios and cultural programmes. The proportion of mines making such arrangements was nearly 12 per cent. in the Residual Group and 5 per cent. in Rajasthan. In all these mines, the cost of the facilities was being met by the managements through *ad hoc* contributions. In addition, in about 9 per cent. of the mines in the country, as a whole, only either cultural programmes were organised or festivals were celebrated.

5.9. *Educational Facilities*

Except for a few mines in Rajputana and Madras, elsewhere the Labour Investigation Committee had not found any educational facilities in the mica mines surveyed by them. In both the States, the facility was in the form of schools for workers' children. The present Survey has also revealed that practically nothing was being done by the managements of mica mines towards the education of their workers' children or workers themselves. Only about 5 per cent. of mica mines in Bihar, representing an overall percentage of 3.4 in the country, as a whole, paid a nominal subsidy to other schools in the vicinity where their workers' children received education.

Adult education centres did not exist in any of the mines surveyed.

5.10. *Transport Facilities*

The Labour Investigation Committee had nothing to report about the provision of transport facilities for workers employed in mica mines. The present Survey has, however, revealed that, with the exception of about one-fifth of the mines covered in Rajasthan, no transport facilities had been provided by any of the other mines covered in the Survey. Of the mines providing the facility in Rajasthan, in about three-fourths the managers were provided with a cycle. The rest paid a cycle allowance at the rate of Rs. 5 per month to a selected few.

5.11. *Other Facilities*

5.11.1. *Grain Shops*—The Labour Investigation Committee observed that generally no effort had been made by the employers to set up cheap grain shops for the benefit of their workers. Even where grain shops existed, the employer always wanted to sell articles at a rate higher than the market rate, with a view to compensating himself for the transport and other incidental expenditure incurred by him in getting the supplies. Because of this, the workers were not able to make much use of them. The present Survey has also revealed that grain shops existed in only 6 per cent. of the mines in the Residual Group and 1.4 per cent. in Bihar or 1.6 per cent. in the country, as a whole. In the grain shops in the Residual Group, the items were sold at cost price while in Bihar, the practice was to charge market rates.

5.11.2. *Co-operative Stores*—Only one mine in the Residual Group was running a co-operative store where provisions were sold to workers on a 'no-profit, no-loss' basis.

5.11.3. *Protective Equipment*—About 53 per cent. of the mines in the country, as a whole, had provided hats made of bamboos to underground workers.

5.12. *Housing*

According to the Labour Investigation Committee, the housing conditions in all the centres of the industry visited by them were far from satisfactory. Only a few mines provided housing accommodation to about 10 to 15 per cent. of their employees. In most of the cases, a few temporary thatched huts were erected where a large number of miners, their families and even strangers were housed. There was no privacy in the huts.

On the basis of the results obtained in the present Survey, it seems that there has been a considerable improvement in this direction. About 91 per cent. of the mica mines in the country, as a whole, had provided housing accommodation to their workers. As against all the mines in the Residual Group, the proportion of mines providing housing accommodation was 93 per cent. in Bihar and 78 per cent. in Rajasthan. Statement 5.2 shows the details regarding the type of accommodation provided, rent charged, percentage of workers housed, etc.

STATEMENT 5.2

Estimated Proportion of Mica Mines Providing Housing Accommodation to Their Employees in 1962-63

Centro	Num- ber of mines	Percent- age of mines provid- ing houses	Estima- ted number of houses provided	Percentage of houses living accommodation			Percentage of mines which charged			Percent age of workers allotted housing accom- moda- tion
				One room	Two rooms	Three rooms or more	Rent from all	No rent from all	Rent from only some emp- loyees	
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)	(xi)
1. Bihar	251	93.2	2,714	87.2	10.6	2.2	..	100.0	..	35.8
2. Rajasthan	87	78.2	478	70.6	18.7	10.7	..	100.0	..	7.5
3. Residual	47	100.0	2,223	84.3	14.3	1.4	..	100.0	..	27.6
4. All India	385	90.6	5,415	84.6	12.8	2.6	..	100.0	..	27.5

Of the total number of houses provided, about 85 per cent. consisted of one-room tenements, 13 per cent. two-room tenements and the rest had more than two rooms. About 27 per cent. of the workers in the industry were allotted houses on 30th June, 1962. The proportion of workers housed was the highest in Bihar (36 per cent.) and the lowest in Rajasthan (7.5 per cent.). The Survey has further revealed that none of the sampled mines in the country providing housing accommodation charged any rent from its workers. In about 86 per cent. of the mines providing houses, the construction was either temporary or *kutchha*.

Of the mines providing housing accommodation, in only about 3 per cent. the benefit was available to all workers. In the rest, the accommodation was allotted to a few employees in certain categories only.

Facilities for building houses by the workers themselves existed in only one sampled mine in the Residual Group. In this mine, workers were given land and material free of cost.

CHAPTER VI

SOCIAL SECURITY

Prior to the attainment of Independence, workers in the country enjoyed only a limited amount of social security. It was mainly in the shape of compensation in case of industrial accidents. Women workers, in addition, were entitled to maternity benefits under the Mines Maternity Benefits Act, 1941. However, after Independence, there has been a considerable enlargement of the scope and content of social security benefits available to workers largely as a result of adoption of various statutory measures as also adjudication awards. The following paragraphs describe briefly the social security enjoyed by workers in the Mica Mining Industry at the time of the Survey.

6.1. *Provident Fund*

The findings of the Survey have revealed that in none of the mica mines surveyed there was any provident fund scheme prior to the enforcement of the Employees' Provident Funds Act, 1952. All the provident funds which existed at the time of the present Survey were solely due to the Act. The Scheme framed under the Act was initially not applied to the Mica Mining Industry. It was extended to this industry only with effect from 31st May, 1960. Till 31st December, 1960, it applied to establishments employing 50 or more workers but with effect from that date the employment limit was lowered to 20.

It is estimated that on 30th June, 1962, 75 per cent. of mica mines in the country had provident fund schemes and about 33 per cent. of the workers were their members. Details for different centres appear in the following Statement 6.1.

STATEMENT 6.1

Percentage of Mica Mines Having Provident Fund Schemes and Percentage of Workers Who Were Members Thereof as on 30th June, 1962.

Centre			Number of mines	Percentage of mines having provident fund schemes	Estimated number of workers employed *	Percentage of workers who were members of provident fund schemes
(i)			(ii)	(iii)	(iv)	(v)
1. Bihar	..	..	251	66.9	11,176	30.0
2. Rajasthan	..	..	87	88.0	4,696	33.8
3. Residual	..	..	47	94.2	6,167	38.9
4. All India	..	..	385	75.0	22,039	33.3

*Covered under the Mines Act, 1952.

It will be seen from the Statement that mines in the Residual Group were leading both from the point of view of percentage of mines having provident fund schemes and their membership. Rajasthan was next in the order, followed by Bihar.

Wherever provident funds had been instituted, the qualifying conditions, rate of contribution, etc., were the same as prescribed under the Employees' Provident Fund Scheme. That is, membership was open to all those employees who were receiving up to Rs. 500 per month and had completed a continuous service of one year. The rate of contribution of employees was $6\frac{1}{4}$ per cent. of basic wage and dearness allowance including cash value of food concessions, if any, and an equal sum was being contributed by the employers.

6.2. *Pension Schemes*

Only one mine covered in the Residual Group had a regular pension scheme which was in addition to the provident fund scheme. The scheme covered only monthly-paid staff who had at least 15 years' continuous service to their credit. The rate at which pension was paid was one-third of average pay during the last three years of service multiplied by the number of years of service divided by 30. It was, however, reported that only two employees were receiving pension on 30th June, 1962.

6.3. *Gratuity Schemes*

The system of paying gratuity in the event of death, retirement and termination of service existed in only three mines in Bihar, giving an overall percentage of 2.6 for the industry, as a whole. In all these mines, the schemes were of a regular nature covering all employees. The only condition prescribed in all the concerned mines was that workers should have completed at least 15 years of continuous service. Everywhere, the rate of payment was five months' consolidated wages.

6.4. *Maternity Benefits*

The information collected during the Survey shows that during the year 1961-62 maternity claims were made in only about 29 per cent. of the mines in the Residual Group. In all, 42 claims were preferred and all of them were paid. Not a single case of maternity claim was reported from any of the mines covered in Bihar or Rajasthan.

6.5. *Industrial Accidents*

According to the data collected in the course of the Survey, it is estimated that during 1961 accidents occurred in nearly 21 per cent. of mica mines in the country. This percentage is composed of 15 per cent. of the mines in Bihar, 11 per cent. in Rajasthan and 65 per cent. in the Residual Group. The rate of accidents per thousand workers, based on the estimate of average daily number employed during 1961, as also distribution of workers involved by nature of accidents, are given in the following Statement 6.2.

STATEMENT 6.2

Estimated Distribution of Workers Involved in Accidents by Nature of Accidents During 1961

Centre	Estimated average daily employment in 1961	Proportion of workers involved in accidents	Estimated distribution of workers involved in accidents resulting in		
			Death	Permanent disability	Temporary disability
(i)	(ii)	(iii)	(iv)	(v)	(vi)
1. Bihar ..	8,487	11.0	..	1.2	9.8
2. Rajasthan	4,129	3.6	1.4	0.7	1.5
3. Residual ..	4,874	10.7	1.0	0.4	9.3
4. All India	17,490	9.1	0.6	0.8	7.7

NOTE—In two mines in Bihar, data were available for the financial year 1961-62.

It will be seen from the above Statement that the rate of accidents in the industry, as a whole, was 9.1 per thousand workers employed, being 11.0 in Bihar, 10.7 in the Residual Group and 3.6 in Rajasthan. Fatal accidents were reported by only a few mines in Rajasthan and the Residual Group. Permanent disability also accounted for an insignificant proportion of workers. Majority of workers were involved in minor accidents causing only temporary disabilities.

6.6. Occupational Diseases

About 14 per cent. of the mica mines in the country reported the existence of occupational diseases. No such diseases were reported from mines covered in Rajasthan. Silicosis and tuberculosis were found to be common in the mines reporting occupational diseases.

CHAPTER VII

INDUSTRIAL RELATIONS

During the course of the Survey, information was collected on certain aspects relating to industrial relations, e.g., extent of development of trade unionism and the arrangements existing in establishments for promoting close contacts and cordial relations between labour and managements. The findings are discussed in the following paragraphs:

7.1. *Industrial Disputes*

Separate statistics relating to industrial disputes are available for the Mica Mining Industry in the country only since 1959 and they are given below:

STATEMENT 7.1
Industrial Disputes in Mica Mines 1959—1963

Year					No of disputes	No. of workers involved	No. of man-days lost
(i)					(ii)	(iii)	(iv)
1959	..	..	..	..	13	1,377	8,702
1960	..	..	..	..	3	325	975
1961	..	..	..	..	5	352	1,033
1962	..	..	..	..	8	402	8,767
1963	..	..	..	..	7	308	1,431

It would be noticed that there was a considerable time-loss during 1959 and 1962. In 1959, there were three disputes in seven mines in Bihar due to retrenchment of some workers, demand for increase in wages and assault of a worker by a supervisor. The disputes lasted for a total of 35 days and accounted for about three-fourths of the total loss of man-days during the year. Similarly, the main reason for a loss of about 8.8 thousand man-days during 1962 was due to the fact that in one mine in Bihar there were two disputes relating to non-payment of dues and increase in wages. These disputes lasted for a total of 78 days accounting for about 93 per cent. of the total man-days lost during the year.

7.2. *Trade Unionism*

No mention of the existence of trade unions in the mica mines in India was made by the Labour Investigation Committee in 1944-45. Information collected during the present Survey also shows that there has not been a fair growth of trade unionism in the industry. It is estimated that at the time of the Survey trade unions existed in nearly 22 per cent.

of the mica mines in the country and about 11 per cent. of workers were members thereof. The details regarding the extent of unionism in various centres of the industry are given in the following Statement 7.2.

STATEMENT 7.2

Extent of Trade Unionism in Mica Mining Industry (1962-63)

Centre	Number of mines	Estimated Percentage of mines where workers were organised into unions	Estimated number of workers in the industry as on 30-6-1962*	Estimated Percentage of workers who were members of trade unions as on 30-6-1962	Estimated Percentage of mines having unions and recognising them
(i)	(ii)	(iii)	(iv)	(v)	(vi)
1. Bihar ..	251	32.2	11,176	21.3	100.0
2. Rajasthan ..	87	..	4,696	..	..
3. Residual ..	47	5.8	6,167	1.8	100.0
4. All India..	385	21.7	22,039	11.3	100.0

*Figures relate to workers covered under the Mines Act, 1952.

The statistics show that trade unionism had developed fairly well in Bihar where nearly one-third of the mines had unions and about one-fifth of the workers were unionised. In Rajasthan, unions were found to be conspicuously absent and in the Residual Group the growth of trade unionism was almost insignificant.

About 96 per cent. of the mines had one union each and the rest, all of which were located in Bihar, had two unions. All the trade unions were recognised by the respective employers. None of the trade unions reported any activity other than securing of claims of their members under various labour Acts.

7.3. *Collective Agreements*

In the course of the Survey, information was collected regarding agreements affecting terms and conditions of service concluded between employers and workers in the sampled establishments since 1956. The results show that such agreements were concluded in about 91 per cent. of the mines in Bihar and 11 per cent. in Rajasthan or 62 per cent. of mica mines in the country, as a whole. None of the mines covered in the Residual Group reported any such agreements. Everywhere, collective agreements took place once only and covered all workers. The items settled related mostly to wages for the weekly day of rest and attendance bonus.

7.4. *Standing Orders*

Under the Industrial Employment (Standing Orders) Act, 1946, which is applicable to this industry also, framing of Standing Orders is obligatory for only those mines which employ 100 or more workers but power is conferred on State Governments to extend the provisions of the Act to mines having lesser employment.

In the course of the Survey, it was found that nearly 21 per cent. of mica mines in the country were under a legal obligation to frame Standing Orders. Of these, about 80 per cent. had complied with the law. The defaulting mines were all located in Bihar. In addition, a few others had also framed Standing Orders although they were not legally required to do so. Thus, it is estimated that the percentage of mica mines having Standing Orders, whether obligatory or not, was nearly 34 for the industry, as a whole. The Standing Orders were certified in about 79 per cent. of the mines. Everywhere, the Standing Orders covered all workers.

7.5. *Labour/Welfare Officers*

With a view to enabling employers to have better arrangements for personnel management and to help them in ensuring proper implementation of labour laws, a specific provision has been made in the Mines Act requiring all mines employing 500 or more workers to appoint Labour/Welfare Officers. Since none of the sampled mines employed 500 or more workers, they were not under any statutory obligation to appoint any such officer and none had done so either.

7.6. *Works/Joint Committees*

Under the Industrial Disputes Act, 1947, constitution of Works Committees is obligatory for those mines which employ 100 or more workers. Some of the State laws which were in force at the time of the Survey also provided for the constitution of Joint Committees. The main idea behind encouraging formation of such committees is to provide a forum for mutual discussion of matters concerning day-to-day relationship between employers and employees so that sources of friction could be eliminated in their initial stages and, thus, good relationship between the two parties could be ensured.

It is estimated that, at the time of the Survey, nearly 21 per cent. of the mines in the country were under a legal obligation to constitute Works/Joint Committees. Of these, about 70 per cent. had complied with the requirement. The defaulting mines were located in Bihar and Rajasthan. Of the mines having Works Committees, in about 72 per cent. the Works Committees consisted of an equal number of representatives of managements and workers. Other details regarding the number of meetings held, items discussed, etc., are given below for each centre:—

Bihar: A Works Committee was found to be functioning in only one of the sampled mines in this Centre. The committee generally met once a month and discussed matters relating to election of office bearers, subsidy for housing, leave, promotions, formation of a Safety Committee, supply of uniforms, taking anti-malaria precautions, games and sports, etc.

Rajasthan: In this centre, only two mines had constituted Works Committees. Out of these two, one mine was not in existence during the 12 months preceding the specified date, i.e., 30th June, 1962 and hence no meeting was held. In the other unit, no minutes of meetings were kept. However, according to the management, 12 meetings of the Works Committee were held during the preceding year.

Residual Group—In this centre, all the mines which employed 100 or more workers had constituted Works Committees. The number of meetings held by such committees during the 12 months preceding the specified date varied between 1 and 5. The items discussed related to grant of paid holidays, supply of phenyle, dismissals, construction of well, allocation of duties, supply of rice at concessional rates, provision of a children's park and a school, housing, gratuity, etc. It was reported that in most of the cases, decisions were taken and also fully implemented.

7.7. Other Committees

None of the mica mines covered in the Survey had constituted any production or welfare committee. However, two mines in Bihar and one mine in the Residual Group, representing about 4 per cent. of the mines in the industry, had safety committees. Their main function was to adopt measures for safety and to give wide publicity to those measures among workers.

7.8. Grievance Procedure

One of the items covered by the Standing Orders framed under the Industrial Employment (Standing Orders) Act, 1946, is the arrangement for settling complaints of workers. Since about one-third of the mica mines in the country had framed Standing Orders under the above Act, they had a specified arrangement for the settlement of grievances of workers. Elsewhere, hardly any mine surveyed was found to have prescribed any definite procedure for the redress of workers' grievances. Generally, the aggrieved workers approached the manager or the proprietor direct. In a few mines, the grievances were initially heard by the Incharges and the complainants approached higher officers only when not satisfied with their decisions. In a few cases, complaints were also discussed by Works Committees or were referred to the Labour Inspector (Central).

CHAPTER VIII

LABOUR COST

Information relating to labour cost was collected in respect of those employees in the sampled mines who were covered under the Mines Act, 1952, and were receiving less than Rs. 400 per month as wages. This was in pursuance of the decision taken by the Study Group on Wage Costs appointed by the Ministry of Labour and Employment in 1959. The enquiry pertaining to labour cost was modelled on the lines of the Study of Labour Cost in European Industry made by the International Labour Office in 1956, with such modifications as were necessary in the light of conditions in India. For instance, in view of the fact that in India wages are paid on the basis of 'day' instead of 'hours' as in European countries, the data were collected for the man days and not man-hours. Similarly, it was found in the course of the pilot enquiry that, but for a very few exceptions, none of the establishments maintained any separate records of premium payments made for leave and holidays or for days not worked and, hence, these were dropped as separate items and included under 'basic wage'. Certain additions were made in the list either on the basis of the decisions of the Study Group referred to above or for eliciting separate information on some of the items on which employers have to incur expenses under labour laws in force in the country, e.g., lay offs, washing facilities, etc.

With a view to obtaining a better estimate of costs in regard to the items of welfare, amenities, etc., salaries and allowances, etc., of those persons who were employed in connection with these items, even though they were covered under the Mines Act and were receiving less than Rs. 400 per month, were not included in the general head 'wages'. Expenses incurred in connection with such persons were recorded against the item for which they were employed. Similarly, man-days worked for such persons were also excluded.

The Survey was launched in October, 1962, and was completed in September, 1963. For purposes of collecting labour cost data, the field staff was instructed to obtain figures of expenditure incurred by the employers during the calendar year 1961. However, where the financial year of the sampled mines was other than the calendar year or where the account books for the specified period were found to be not ready or available for some reasons, the field staff was permitted to take the information for the last year for which it was available provided it covered the major part of 1961. It was possible to collect information for this period from all the mica mines except one.

8.1. *Labour Cost Per Man-day Worked*

The data collected show that the labour cost per man-day worked in the Mica Mining Industry was estimated at Rs. 2.55. The figure was highest in the case of Bihar (Rs. 2.84) and the lowest in the case of Rajasthan (Rs. 2.09). For the Residual Group it was Rs. 2.43.

8.2. *Components of Labour Cost*

Statement 8.1 shows the break-up of labour cost by components:

STATEMENT 8.1

Estimated Labour Cost Per Man-day Worked by Components in Mica Mines (1961-62)

Centre	(In Rupees)				
	Wages	Premium pay for overtime and late shifts	Bonuses	Other cash payments	Payments in kind
(i)	(ii)	(iii)	(iv)	(v)	(vi)
1. Bihar ..	2.39 (84.16)	..	0.01 (0.35)	0.30 (10.56)	*
2. Rajasthan	1.91 (91.38)	0.01 (0.48)	0.01 (0.48)	0.01 (0.48)	0.01 (0.48)
3. Residual ..	2.16 (88.89)	*	0.07 (2.88)	0.01 (0.41)	*
4. All India	2.21 (86.67)	*	0.03 (1.18)	0.15 (5.88)	*

Centre	Social Security contributions		Subsidies	Welfare Centres non-obligatory	Direct benefits	Payments related to labour cost	Others	Total
	Obligatory	Non-obligatory						
	(vii)	(viii)	(ix)	(x)	(xi)	(xii)	(xiii)	(xiv)
1. Bihar ..	0.07 (2.47)	..	0.06 (2.11)	..	..	0.01 (0.35)	*	2.84 (100.00)
2. Rajasthan	0.06 (2.87)	..	0.08 (3.83)	..	..	*	..	2.09 (100.00)
3. Residual ..	0.10 (4.12)	*	0.08 (3.29)	..	*	0.01 (0.41)	*	2.43 (100.00)
4. All India..	0.08 (3.14)	*	0.07 (2.74)	..	*	0.01 (0.39)	*	2.55 (100.00)

NOTE—Figures shown in brackets are percentages to total in col. (xiv).

*Indicates that the expenses were less than Re. 0.005 per man-day worked.

8.2.1. *Wages*—The term 'wages' includes basic wage, dearness allowance, incentive/production bonus and attendance bonus. It was desired to collect data under this head in respect of the man-days actually worked as well as for the man-days not worked but paid for. However, in the course of the pilot enquiry it was found that most of the employers did not maintain separate records of payments made for the days worked and for leave and holiday periods. Consequently, there was no alternative but to record sums paid for the days worked as well as for the days not worked but paid for.

Of the various components, 'wages' alone accounted for about 87 per cent. of the total labour cost in the industry. As between different centres, its proportion varied between 84 (Bihar) and 91 per cent. (Rajasthan).

The following Statement 8.2 shows the break-up of the figures of 'wages' by various components, viz., basic wage (including dearness allowance), production or incentive bonus and attendance bonus.

STATEMENT 8.2
Break-up of Wage Cost by Components

Centre	(In Rupees)			
	Basic wage and dearness allowance	Incentive/ Production bonus	Attendance Bonus*	Total
(i)	(ii)	(iii)	(iv)	(v)
1. Bihar	2.20 (92.05)	..	0.19 (7.95)	2.39 (100.00)
2. Rajasthan	1.91 (100.00)	..	..	1.91 (100.00)
3. Residual	2.16 (100.00)	..	..	2.16 (100.00)
4. All India	2.12 (95.93)	..	0.09 (4.07)	2.21 (100.00)

NOTE -The figures shown in brackets are percentages to total in col. (v).

*Represents quarterly and monthly bonus.

From the Statement it will be seen that basic wage and dearness allowance alone accounted for about 96 per cent. of the total 'wages' cost and attendance bonus (i.e., quarterly and monthly bonus) for the rest. In Rajasthan and the Residual Group, the entire amount was claimed by basic wage and dearness allowance. Quarterly and monthly bonuses, which accounted for nearly 4 per cent. of the total 'wages' cost, featured in Bihar alone.

8.2.2. *Premium Pay for Overtime and Late-shifts*—Under this head, only the premium part of the payments made for overtime or late-shift working was taken into account. For example, if a worker was paid one and a half times his normal rates of wages for working late hours, only the extra amount paid to him, i.e., one half in this case, was treated as the premium pay. The present Survey has shown that the contribution made by this element to the total labour cost was almost negligible.

8.2.3. *Bonuses*—Under this head, data were collected in respect of payments made to the employees on account of festival and year-end bonuses. It constituted only 1.18 per cent. of the total labour cost in the industry, as a whole.

8.2.4. *Other Cash Payments*—The figures given in Statement 8.1 show that 'other cash payments' constituted an important element of labour cost, next only to wages. It formed 5.88 per cent. of the total labour cost and expenses on this account were attributable to house-rent allowance, rice allowance, first-aid allowance, underground allowance, gun allowance, machine allowance, servant allowance, milk allowance, water allowance, cook allowance, grain allowance, etc. Its proportion to the total labour cost was as high as 11 per cent. in the case of Bihar. Elsewhere its share was not material.

8.2.5. *Payments in Kind*—At the all India level, this element of payment constituted a very negligible proportion to the total labour cost.

8.2.6. *Social Security Contributions*—Social security contributions formed the third important element of the labour cost. At the industry-level, it constituted 3.14 per cent. of the total labour cost. Information in respect of this element of labour cost was collected under two heads, viz.,

(a) obligatory—i.e., those expenses which the employers were required to incur under certain labour laws, and (b) non-obligatory—i.e., those expenses which the employers were incurring on a voluntary basis. Almost the whole of the expenses on this account were on obligatory social security contributions. The following Statement 8.3 shows the break-up of expenses under various groups relating to obligatory social security contributions.

STATEMENT 8.3

Estimated Cost of Obligatory Social Security Contributions Per Man-day Worked

Centro	Provident Fund	Retrenchment compensation	Lay-off compensation	Employees State Insurance Contribution	(In Rupees)	
					Compensation for Employment injury	Occupational diseases
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)
1. Bihar	0.07 (100.00)	*	*	..	*	..
2. Rajasthan	0.06 (100.00)	..	..	..	*	..
3. Residual	0.06 (60.00)	*	..	..	*	0.04 (10.00)
4. All India	0.06 (75.00)	*	*	..	*	0.02 (25.00)

Centre	Maternity benefits	Dependents allowance	Others	Total	Non-obligatory	Total obligatory and non-obligatory social security contributions	Percentage of social security contributions to total labour cost
	(viii)	(ix)	(x)	(xi)	(xii)	(xiii)	(xiv)
1. Bihar	0.07 (100.00)	..	0.07	2.47
2. Rajasthan	0.46 (100.00)	..	0.06	2.87
3. Residual	*	0.10 (100.00)	*	0.10	4.12
4. All India	*	0.08 (100.00)	*	0.08	3.14

NOTE—Figures shown in brackets are percentages to cost (xi).

*Indicates that the expenses were less than Rs. 0.005 per man-day worked.

It would appear from the Statement that the cost on account of obligatory social security contributions was largely due to provident fund which accounted for nearly three-fourths. The balance was more or less accounted for by compensation for occupational diseases. Only a few mines covered reported a small expenditure in the form of retrenchment compensation, lay-off compensation, employment injury and maternity benefits. So far as individual centres are concerned, in Bihar and Rajasthan almost all the expenditure was on provident fund.

8.2.7. *Subsidies*—Under this head, expenses incurred by employers in providing various types of facilities and services to their employees and members of their families were recorded. These include medical and

health services, canteens, restaurant and other food services, company housing, building fund, credit unions and other financial aid services, creches, educational services, cultural services (library, reading room, etc.) recreation services (clubs, sports, cinema, theatre, etc.), transport, sanitation (at work places), drinking water facility, vacation, homes, etc. The amounts recorded were net payments made including depreciation but excluding capital expenditure.

In the course of the pilot Survey, it was experienced that, generally, employers did not maintain separate records for the above mentioned items or the expenses incurred related not only to persons falling within the scope of the study but also to others. Due to these limitations, the field staff were asked to obtain estimates from employers, wherever separate data were not available. In case any expenses were incurred on workers covered by the study as well as on other employees, the amount was estimated on the basis of the proportion which the persons covered under the study formed to the total employees. The following Statement 8.4 shows the cost of subsidies per man-day worked in the industry.

STATEMENT 8.4

Estimated Cost of Subsidies Per Man-day Worked in Mica Mines (1961-62)
(In Rupees)

Centre	Medical and Health Services	Canteens	Restaurant and Other Food Services	Company Housing	Creches	Cultural Services	Recreational Services
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)
1. Bihar	0.02 (33.33)	..	..	*
2. Rajasthan	*	0.02 (25.00)	..	*	*
3. Residual	*	*	..	0.03 (37.50)	0.01 (12.50)	0.01 (12.50)	*
4. All India	*	*	..	0.02 (28.57)	*	*	*

Centre	Transport	Sanitation	Drinking water facilities	Building Fund, credit unions, educational Services, Vacation Homes and Other Family Services	Others	Total	Percentage of subsidies cost to total labour cost
	(ix)	(x)	(xi)	(xii)	(xiii)	(xiv)	(xv)
1. Bihar	..	*	0.04 (66.67)	*	..	0.06 (100.00)	2.11
2. Rajasthan	*	0.01 (12.50)	0.05 (62.50)	..	..	0.08 (100.00)	3.83
3. Residual	..	*	0.03 (37.50)	*	..	0.08 (100.00)	3.29
4. All India	*	0.01 (14.29)	0.04 (57.14)	*	..	0.07 (100.00)	2.74

NOTE—Figures shown in brackets are percentages to total in col. (xiv).

*Indicates that the expenses were less than Re. 0.005 per man-day worked.

Expenses on account of subsidies formed 2.74 per cent. of the total labour cost in the industry, as a whole. The highest expenditure was on drinking water facilities, constituting about 57 per cent. of the total expenses under the group, followed by company housing (29 per cent.) and sanitation (14 per cent.). Only a few mines spent very little on medical and health services, canteens, creches, cultural services, recreation services, transport, etc.

8.2.8. *Direct Benefits*—Only a few mines in the Residual Group reported a small expenditure under this head. The expenditure related to payments made by employers on marriage.

8.2.9. *Payments Related to Labour Cost*—Under this group, expenses relating to recruitment, vocational training, apprenticeship and on-the-job medical services were recorded. A perusal of Statement 8.1 (col. xii) would show that this element constituted only 0.39 per cent. of the total labour cost in the industry. The main items of expenditure under this group were apprenticeship and training (36 per cent.) and on-the-job medical services (64 per cent.).

8.2.10. *Others*—Under this head, only those expenses which could not be grouped under any of the heads or sub-heads of the labour cost items, were recorded. Some of the employers in Bihar and Residual Group reported some expenditure on the supply of kerosene oil and protective equipment to workers. As the sums reported were quite insignificant, they have not been reflected in Statement 8.10.

CHAPTER IX

SUMMARY OF CONCLUSIONS

From the point of view of employment, the Mica Mining Industry ranks fifth among the mining industries of India. On the basis of the data collected during the Survey, it is estimated that the total number of persons employed in the industry was about 22 thousand in June, 1962. Of these, nearly 89 per cent. were "Production and Related Workers". "Watch and Ward and Other Services" constituted the next important group and accounted for about 7 per cent. of the total. The other groups accounted for the rest. About three-fourths of the production workers were engaged in underground mining operations and the rest were surface workers.

About 90 per cent. of the working force in the industry consisted of men. Women formed 9.8 per cent. to the total and the rest were adolescents. Child labour was found to be entirely absent.

Almost all the workers in the industry were time-rated.

The system of employing workers through contractors was not very much in vogue in the industry. At the time of the Survey, such a system was noticed in a few mines in Bihar only. On the basis of the data collected, it is estimated that contract labour constituted about 11 per cent. of the total production workers in Bihar or only 5 per cent. of the total production workers employed in the industry, as a whole.

Information collected during the survey in respect of employment status of production workers employed direct shows that about 52 per cent. of the workers in the industry were permanent, 47 per cent. temporary and the rest were apprentices. The proportion of permanent workers was the highest (67 per cent.) in mines in the Residual Group. In Bihar and Rajasthan, temporary workers accounted for the bulk of the working force.

About two-thirds of production workers in the industry had less than one year's service to their credit and only about 3 per cent. had a service of 10 years or more. The shorter length of service of most of the employees was reported to be due mostly to the workers quitting the job in order to attend to agricultural operations in their villages. It may also be due to frequent abandoning of working of mines.

The average absenteeism rate in the industry, as a whole, during July, 1961 to June, 1962 was about 15 per cent. The monthly rates reflect the usual pattern of higher absences during rainy season, sowing and harvesting seasons and festivals. The rate was generally higher among underground workers than among those employed for surface or opencast work.

The annual accession and separation rates were of the order of 21 and 19 per cent. respectively during the above mentioned period. Accession as well as separation rates are invariably higher in the case of underground workers than those employed aboveground.

About one-fifth of the mica mines in the country stated that they were providing training and apprenticeship facilities. However, in all of them, such facilities were on an *ad hoc* basis only.

The wage rates in the industry were found to have been standardised on a regional basis. All the mica mines covered in the course of the Survey were reported to be paying minimum wages fixed under the law.

The estimated average daily earnings of all workers in the industry in the country were Rs. 2.19 in June, 1962. Similar figures in respect of all production workers and all lowest-paid production workers were Rs. 2.01 and Rs. 1.63 respectively. Men production workers were getting more than women production workers.

The average daily earnings of 'Clerical and Related Employees' and those belonging to the group 'Watch and Ward and Other Services' were Rs. 3.67 and Rs. 2.04 respectively in June, 1962.

Information collected in the course of the Survey in respect of various components of earnings shows that basic earnings (i.e., basic wage and dearness allowance) constituted nearly 91 per cent. of the total earnings of all workers. The other material component was 'other cash allowances' which accounted for 5.5 per cent. of the total earnings. There was no profit-sharing scheme in any of the mines covered. However, year-end bonus was being paid in about one-fifth of the mines in the country, as a whole.

About 30 per cent. of the mines worked one shift, 41 per cent. two shifts, 28 per cent. three shifts and the rest had four shifts a day. Night-shift was worked in 42 per cent. of the mines and in about 40 per cent. of them there was a regular system of change-over from one shift to another. Generally, no special amenities were provided to night-shift workers. Nowhere, the daily and weekly hours of work exceeded 8 and 48 respectively. Certain violations were, however, noticed in regard to rest-intervals, observance of timings and spread-over. In about 38 per cent. of the mines having surface working and 90 per cent. having underground work, there was no fixed rest-interval. Similarly, normal timings were not adhered to in about 5 per cent. of the mines in the country, as a whole. In one mine, covered in the Residual Group, the spread-over for majority of production workers employed underground was 9 hours as against 8 fixed by law.

Nearly 70 per cent. of the mines in the country were found to have provided latrines and in most of them, they were of the old type. In about three-fourths of the mines providing latrines, the privies were found to be properly screened. But the compliance of the law in regard to urinals was not so good. Such arrangements were found to have been made in only about 15 per cent. of the mines.

All the mines surveyed were granting earned leave with pay to their employees according to the provisions of the Mines Act. Data collected regarding the number of workers who availed of leave during the year 1961 show that about 34 per cent. of the workers enjoyed leave and about 35 per cent. took between 11 and 15 days' leave.

The system of granting casual leave with pay was found to be in vogue in 54 per cent. of the mica mines in the country. The number of days allowed and the categories of employees entitled to leave, generally, differed from centre to centre. About 82 per cent. of the mines allowed such leave up to 10 days in a year.

Managements of 53.5 per cent. of the mica mines in the country were granting sick leave with pay to their employees. As in the case of casual leave, the type of workers who were entitled to sick leave and the period of leave granted varied from one centre to another. It was generally granted either to permanent employees or only monthly-rated staff.

The practice of granting national and festival holidays with pay existed in all the mica mines covered in the Survey. The number of such holidays allowed in a year ranged from 2 to 11.

All the mines surveyed were found to have provided drinking water facilities for their employees and the predominant arrangement was earthen pitchers. About 86 per cent. of the mines also stated that they made some arrangements for the supply of cool drinking water during summer months. These arrangements were also mostly in the form of earthen pitchers.

Washing facilities in one form or other had been provided by about 15 per cent. of the mines in the country.

Of the mines which were under a legal obligation to maintain canteens, only two-thirds had provided this facility. All these canteens sold tea, coffee and snacks either at market rates or on a 'no-profit, no-loss' basis.

Besides those mines which were required under law to provide rest-shelters, some others had also provided this facility. Thus, rest-shelters had been provided in about 61 per cent. of the mines in the country.

Only about 17 per cent. of the mica mines statutorily required to maintain creches had done so.

First-aid boxes were being kept in almost all the mines covered in the Survey, but in only 15 per cent. of them, they were found to be containing the prescribed contents. Except about 8 per cent. of the mica mines, everywhere first-aid boxes were under the charge of trained first-aiders. Not a single sampled mine was under a legal obligation to maintain an ambulance room. Nevertheless, two were found to have provided one ambulance room each.

Not much attention was being paid to the provision of recreation and cultural facilities to workers as such facilities existed in only about 11 per cent. of the mines in the country, as a whole.

Practically nothing was being done by the managements of mica mines for the education of workers' children and none of the mines surveyed had made arrangements for adult education.

Only a negligible proportion of mines was running grain-shops.

About 53 per cent. of the mica mines in the country provided hats made of bamboos to underground workers.

The information collected on housing shows that nearly 91 per cent. of the mica mines in the country were providing housing accommodation to their employees. However, the benefit was not very extensive as only 27.5 per cent. of workers were housed. No rent was charged by any mine providing accommodation. The construction of houses was either temporary or *kutchha* in about 86 per cent. of the mines providing the facility.

The security against the contingency of old age which the workers in the industry enjoy seems to be entirely due to the Employees' Provident Fund Act, 1952 as none of the mica mines covered in the course of the Survey had any provident fund scheme prior to the extension of the Act to mica mines in 1960. At the time of the Survey, provident fund schemes existed in 75 per cent. of mica mines in the country and about 33 per cent. of workers were members thereof as on 30th June, 1962.

A pension scheme existed in only one mine covered in the Residual Group. The system of paying gratuity existed in three mines covered in Bihar, giving a percentage of 2.6 for the industry, as a whole.

It is estimated that, in 1961, industrial accidents occurred in about 21 per cent. of mica mines in the country and the proportion of workers involved in accidents was 9.1 per thousand employed. Most of the accidents resulted in temporary disability only.

About 14 per cent. of the mica mines in the country reported occupational diseases like Silicosis and Tuberculosis.

It is estimated that trade unions existed in about 22 per cent. of the mica mines in the country and about 11 per cent. of workers were members of the unions as on 30th June, 1962. The growth of trade unionism was, more or less, confined to Bihar only. Everywhere, trade unions were found to have been recognised by the managements. The only activity of the unions was securing of claims of their members under various labour laws.

Collective agreements since 1956 were found to have been concluded in about 62 per cent. of mica mines in the country and were confined to weekly off and attendance bonus only.

About 80 per cent. of the mica mines which employed 100 or more workers had framed Standing Orders. Including a few others, which had framed Standing Orders voluntarily, it is estimated that the percentage of mines having such Orders was 34 for the industry, as a whole. The Orders were certified in about 79 per cent. of the mines. Everywhere, Standing Orders covered all workers.

Nearly 21 per cent. of the mines in the country were under a legal obligation to constitute Works Committees. Of these, 70 per cent. had complied with the law. About 4 per cent. of mica mines in the country were found to have constituted Safety Committees.

Information collected regarding the system of settling grievances of workers in the industry shows that about one-third of the mines had laid down the procedure in the Standing Orders framed by them. However, the general practice was that whenever a worker had any grievance, he approached the Incharge, Manager or the Proprietor and made an oral or written complaint.

Data relating to labour cost in respect of workers covered under the Mines Act and receiving less than Rs. 400 per month show that labour cost per man-day worked in the industry, as a whole, was Rs. 2.55. In the case of individual centres, it worked out to Rs. 2.84, Rs. 2.09 and Rs. 2.43 respectively for Bihar, Rajasthan and the Residual Group. Wages, i.e., basic wage, dearness allowance and incentive or attendances bonuses, constituted the major element of the labour cost and accounted for nearly 87 per cent. of the total. The next important element of the labour cost was 'other cash payments' which accounted for about 6 per cent. of the total, followed by obligatory social security contributions (3.1 per cent.) and subsidies (2.7 per cent.).

APPENDIX

A BRIEF NOTE ON THE SAMPLE DESIGN AND THE METHOD OF ESTIMATION ADOPTED

1. *Sample Design*—For the Survey of Labour Conditions, a multi-stage sampling procedure with industry as a stratum, with further regional strata for those industries which were found to be highly concentrated in particular regions or areas was followed. The registered factories/mines belonging to those industries for which regional stratification was found necessary were stratified, and each centre or area of high concentration was taken as a separate regional stratum of the industry and the remaining scattered factories/mines were clubbed together into a single residual stratum. Establishments in an industry/regional stratum were arranged in a frequency distribution fashion with suitable class intervals and were divided into two size groups, large and small, on the basis of an optimum cut-off point derived for each industry. The optimum cut-off point was so derived that if all the establishments in the upper size group were included in the sample, the results obtained would yield an estimate of overall employment within 5 per cent. error at 95 per cent. confidence interval, and the sample size would be minimum. The optimum cut-off point varied from industry to industry. For the Mica Mining Industry it was chosen as 39 which was approximately equal to the average size of employment in the Industry. However, considering the limited resources available for the Survey of Labour Conditions and the practicability, etc., it was thought that a sample of 25 per cent. from the upper size-group and 12½ per cent. from the lower size-group would yield reliable results. However, the experience of earlier Surveys had shown that due to (i) non-availability of very recent frame, (ii) closures and (iii) units changing their line of production, considerable shrinkage had occurred in the desired sample size. Hence it was decided that for taking into account such closures, etc., the required sample size should be increased to allow for the above mentioned shrinkage. Having thus increased the sample size, the units which were found to be closed or which had changed their line of production were simply ignored and no substitution for such cases was made.

The ultimate sampling units, namely, registered factories/mines within an industry/regional stratum, were arranged by contiguous States and within each State by contiguous districts in a serpentine fashion so that districts formed a continuous chain from one State to another. Having arranged the list of units in the above manner, the units above the optimum cut-off point were taken in the upper size class and the rest in the lower size class. From these size-groups, the required number of units were selected by systematic sampling with a random start. The frame on the basis of which the sample for the Mica Mining Industry was selected was the list of registered mines for the year 1958.

2. *Method of Estimation*—In the course of the Survey, various characteristics were studied, some of which were correlated with employment whereas there were others which were correlated not with employment but with the number of establishments. Consequently, two different methods were used for working out estimates. For estimating the totals of

those characteristics which are highly correlated with employment such as absenteeism, labour turnover, earnings, labour cost, etc., the ratio of total employment was used as the blowing-up factor. For estimating the totals of those characteristics which are not correlated with employment such as daily hours of work, number of units providing certain welfare facilities, etc., the ratio of units was used as the blowing-up factor. Estimates of percentages have been arrived at by computing in each case the ratio of the estimates of the totals for the two characteristics involved.

In any stratum, the estimate for the total of X-characteristics not correlated with employment is given by

$$X = \frac{N_u - N'_u}{n_u - n'_u} \sum_i X_{i_u} + \frac{N_L - N'_L}{n_L - n'_L} \sum_i X_{i_L} \quad \dots \quad (1)$$

The summation extending over all the sampled units surveyed in the stratum

Where X = the estimated total of the X-characteristic for a particular stratum;

N_u and N_L = the number of units in the original population as featuring in the 1958 list which was used as frame in the upper and lower size-groups respectively of the stratum concerned;

N'_u and N'_L = the number of units which featured in the 1958 list but were not featuring in the latest available list nearest to the period of survey in the upper and lower size-groups respectively of the stratum concerned;

n_u and n_L = the total number of units in the sample (from 1958 list) in the upper and lower size-groups respectively of the stratum concerned;

n'_u and n'_L = the number of sampled units, which were found at the time of the survey to be closed or to have changed the line of production and, hence, left out in the upper and lower size-groups respectively of the stratum concerned;

X_{i_u} and X_{i_L} = the total of X-characteristic in the i-th sample unit of the upper and lower size-groups respectively of the stratum concerned.

The totals for an industry are obtained by summing up the totals obtained on the basis of the above formula for each one of the strata of the industry.

In any stratum, the estimate for the γ -characteristic correlated with employment is given by

$$Y = \frac{E_{N_u} - N'_u}{E_{n_u} - n'_u} \sum_i Y_{i_u} + \frac{E_{N_L} - N'_L}{E_{n_L} - n'_L} \sum_i Y_{i_L} \quad \dots \quad (2)$$

The summation extending over all the sampled units surveyed in the stratum

Where Y = the estimated total of the γ -characteristic for a particular stratum.

$EN_u = N'_u$ and $EN_L = N'_L$ = the total employment in 1958 in the $N_u = N'_u$ and $N_L = N'_L$ units respectively.

$E_{n_u} = n'_u$ and $E_{n_L} = n'_L$ = the total Y employment in 1958 in $n_u = n'_u$ and $n_L = n'_L$ sampled units respectively.

Y_{i_u} and Y_{i_L} = the total of γ -characteristic in the i -th sample unit of the upper and lower size groups respectively of the stratum concerned.

The totals for an industry are obtained by summing up the totals obtained on the basis of the above formula for each one of the strata of an industry.

